

Al Turki S, Manickaraj AK, Mercer CL, Gerety SS, Hitz MP, Lindsay S, D'Alessandro LC, Swaminathan GJ, Bentham J, Arndt AK, Low J, Breckpot J, Gewillig M, Thienpont B, Abdul-Khaliq H, Harnack C, Hoff K, Kramer HH, Schubert S, Siebert R, Toka O, Cosgrove C, Watkins H, Lucassen AM, O'Kelly IM, Salmon AP, Bu'lock FA, Granados-Riveron J, Setchfield K, Thornborough C, Brook JD, Mulder B, Klaassen S, Bhattacharya S, Devriendt K, Fitzpatrick DF, UK10K Consortium, Wilson DI, Mital S, Hurles ME. Rare variants in NR2F2 cause congenital heart defects in humans. *Am. J. Hum. Genet.* **94**, 574-585 (2014).

Ammann JU, Trowsdale J. Development and use of IgM/J-chain fusion proteins for characterization of immunoglobulin superfamily ligand-receptor interactions. *Curr. Protoc. Protein Sci.* **75**, doi: 10.1002/0471140864.ps1924s75 (2014).

Antrobus R, Wakefield JG. Isolation, identification, and validation of microtubule-associated proteins from Drosophila embryos. *Methods in Molecular Biology* 273-291 (2014).

Arif, S., Leete, P., Nguyen, V., Marks, K., Nor, N. M., Estorninho, M., . . . Peakman, M. Blood and islet phenotypes indicate immunological heterogeneity in type 1 diabetes.. *Diabetes.* **63**(11), 3835-3845 (2014).

Bashirova AA, Martin-Gayo E, Jones DC, Qi Y, Apps R, Gao X, Burke PS, Taylor CJ, Rogich J, Wolinsky S, Bream JH, Duggal P, Hussain S, Martinson J, Weintrob A, Kirk GD, Fellay J, Buchbinder SP, Goedert JJ, Deeks SG, Pereyra F, Trowsdale J, Lichtenfeld M, Telenti A, Walker BD, Allen RL, Carrington M, Yu XG. LILRB2 interaction with HLA class I correlates with control of HIV-1 infection. *PLoS Genet.* **10**, e1004196 (2014).

Behrens, M. A., Sendall, T. J., Pedersen, J. S., Kjeldgaard, M., Huntington, J. A., & Jensen, J. K. The shapes of z-a1-antitrypsin polymers in solution support the C-terminal domain-swap mechanism of polymerization.. *Biophys J*, **107**(8), 1905-1912 (2014).

Bell, C. J., Sun, Y., Nowak, U. M., Clark, J., Howlett, S., Pekalski, M. L., . . . Peterson, L. B. Sustained in vivo signaling by long-lived IL-2 induces prolonged increases of regulatory T cells.. *J Autoimmun.* doi:10.1016/j.jaut.2014.10.002 (2014).

Bennett, D. L., & Woods, C. G. Painful and painless channelopathies. *Lancet Neurol*, **13**(6), 587-599 (2014).

Béziat V, Traherne J, Malmberg JA, Ivarsson MA, Björkström NK, Retière C, Ljunggren HG, Michaëlsson J, Trowsdale J, Malmberg KJ. Tracing dynamic expansion of human NK-cell subsets by high-resolution analysis of KIR repertoires and cellular differentiation. *Eur. J. Immunol.* 10.1002/eji.201444464 (2014).

Bökers S, Ubat A, Daniel C, Amann K, Smith KG, Espéli M, Nitschke L. Siglec-G deficiency leads to more severe collagen-induced arthritis and earlier onset of lupus-like symptoms in MRL/lpr mice. *J. Immunol.* **192**, 2994-3002 (2014).

Boname, J. M., Bloor, S., Wandel, M. P., Nathan, J. A., Antrobus, R., Dingwell, K. S., . . . Lehner, P. J. Cleavage by signal peptide peptidase is required for the degradation of selected tail-anchored proteins.. *J Cell Biol*, **205**(6), 847-862 (2014).

Borner GH, Hein MY, Hirst J, Edgar JR, Mann M, Robinson MS. Fractionation Profiling: a fast and versatile approach for mapping vesicle proteomes and protein-protein interactions. *Mol. Biol. Cell* pii: mbc.E14-07-1198 (2014).

Brandstaetter H, Kruppa AJ, Buss F. Huntingtin is required for ER-to-Golgi transport and for secretory vesicle fusion at the plasma membrane. *Dis Model Mech.* **12**, 1335-40 (2014).

Bras, J., Guerreiro, R., Darwent, L., Parkkinen, L., Ansorge, O., Escott-Price, V., . . . Hardy, J. Genetic analysis implicates APOE, SNCA and suggests lysosomal dysfunction in the etiology of dementia with Lewy bodies.. *Hum Mol Genet*, 23(23), 6139-6146 (2014).

Breusegem SY, Seaman MN. Image-based and biochemical assays to investigate endosomal protein sorting. *Methods Enzymol.* **534**, 155-178 (2014).

Breusegem SY, Seaman MN. Genome-wide RNAi Screen Reveals a Role for Multipass Membrane Proteins in Endosome-to-Golgi Retrieval. *Cell Rep.* Dec 11;9(5):1931-45 (2014).

Buettner F, Moignard V, Göttgens B, Theis FJ. Probabilistic PCA of censored data: accounting for uncertainties in the visualization of high-throughput single-cell qPCR data. *Bioinformatics* doi: 10.1093/bioinformatics/btu134 (2014).

Bui T-H, Raymond FL, Van den Veyver IB. Current controversies in prenatal diagnosis 2: Should incidental findings arising from prenatal testing always be reported to patients? *Prenatal Diagnosis* **34**, 12-17 (2014).

Burren OS, Guo H, Wallace C. VSEAMS: A pipeline for variant set enrichment analysis using summary GWAS data identifies IKZF3, BATF and ESRRA as key transcription factors in type 1 diabetes. arXiv:1404.4482 (2014).

Calero-Nieto FJ, Ng FS, Wilson NK, Hannah R, Moignard V, Leal-Cervantes AI, Jimenez-Madrid I, Diamanti E, Wernisch L, Göttgens B. Key regulators control distinct transcriptional programmes in blood progenitor and mast cells. *EMBO J.* **33**, 1212-1226 (2014).

Chambers, J. E., & Marciniak, S. J. Cellular Mechanisms of Endoplasmic Reticulum Stress Signaling in Health and Disease. 2. Protein misfolding and ER stress.. *Am J Physiol Cell Physiol*, 307(8), C657-C670 (2014).

Chan, W. L., Zhou, A., & Read, R. J. Towards engineering hormone-binding globulins as drug delivery agents.. *PLoS One*, 9(11), e113402 (2014).

Chen, L., Kostadima, M., Martens, J. H., Canu, G., Garcia, S. P., Turro, E., . . . Rendon, A. Transcriptional diversity during lineage commitment of human blood progenitors.. *Science*, 345(6204), 1251033 (2014).

Clarke HJ, Chambers JE, Liniker E, Marciniak SJ. Endoplasmic Reticulum Stress in Malignancy. *Cancer Cell* **25**, 563-573 (2014).

Clatworthy, M. R., Aronin, C. E., Mathews, R. J., Morgan, N. Y., Smith, K. G., & Germain, R. N. Immune complexes stimulate CCR7-dependent dendritic cell migration to lymph nodes. *Nature Med* 20(12), 1458-1463(2014).

Clatworthy MR, Matthews RJ, Doehler B, Willcocks LC, Opelz G, Smith KG. Defunctioning polymorphism in the immunoglobulin G inhibitory receptor (FcγRIIB-T/T232) does not impact on kidney transplant or recipient survival. *Transplantation* **98**, 285-291 (2014).

Colucci F, Moffett A, Trowsdale J. Medawar and the immunological paradox of pregnancy: 60 years on. *Eur. J. Immunol.* **44**, 1883-1885 (2014).

Cooper, N. J., Shtir, C. J., Smyth, D. J., Guo, H., Swafford, A. D., Zanda, M., . . . Todd, J. A. Detection and correction of artefacts in estimation of rare copy number variants and analysis of rare deletions in type 1 diabetes.. *Hum Mol Genet.* doi:10.1093/hmg/ddu581 (2014).

Corrochano, S., Renna, M., Osborne, G., Carter, S., Stewart, M., May, J., . . . Acevedo-Arozena, A. Reducing Igf-1r levels leads to paradoxical and sexually dimorphic effects in HD mice.. *PLoS One*, 9(8), e105595 (2014).

Cruchaga, C., Karch, C. M., Jin, S. C., Benitez, B. A., Cai, Y., Guerreiro, R., . . . Goate, A. M. Rare coding variants in the phospholipase D3 gene confer risk for Alzheimer's disease.. *Nature*, 505(7484), 550-554 (2014).

de Diego, I., Veillard, F., Sztukowska, M. N., Guevara, T., Potempa, B., Pomowski, A., . . . Gomis-Rüth, F. X. Structure and Mechanism of Cysteine Peptidase Gingipain K (Kgp), a Major Virulence Factor of *Porphyromonas gingivalis* in Periodontitis.. *J Biol Chem*, 289(46), 32291-32302 (2014).

Dickel DE, Zhu Y, Nord AS, Wylie JN, Akiyama JA, Afzal V, Plajzer-Frick I, Kirkpatrick A, Göttgens B, Bruneau BG, Visel A, Pennacchio LA. Function-based identification of mammalian enhancers using site-specific integration. *Nature Meth*. doi: 10.1038/nmeth.2886 (2014).

Downes K, Marcovecchio ML, Clarke P, Cooper JD, Ferreira RC, Howson JMM, Jolley J, Nutland S, Stevens HE, Walker NM, Wallace C, Dunger DB, Todd JA. Plasma concentrations of soluble IL-2 receptor α (CD25) are increased in type 1 diabetes and associated with reduced C-peptide levels in young patients. *Diabetologia* 57, 366-372 (2014).

Echols N, Moriarty NW, Klei HE, Afonine PV, Bunkí_czi G, Headd JJ, McCoy AJ, Oeffner RD, Read RJ, Terwilliger TC, Adams PD. Automating crystallographic structure solution and refinement of protein-ligand complexes. *Acta Crystallogr D Biol Crystallogr*. 70, 144-154 (2014).

Echols N, Morshed N, Afonine PV, McCoy AJ, Miller MD, Read RJ, Richardson JS, Terwilliger TC, Adams PD. Automated identification of elemental ions in macromolecular crystal structures. *Acta Crystallogr D Biol Crystallogr*. 70, 1104-1114 (2014).

Escott-Price, V., Bellenguez, C., Wang, L. S., Choi, S. H., Harold, D., Jones, L., . . . Cardiovascular Health Study (CHS). (2014). Gene-wide analysis detects two new susceptibility genes for Alzheimer's disease.. *PLoS One*, 9(6), e94661 (2014).

Esposito, L., Hunter, K. M., Clark, J., Rainbow, D. B., Stevens, H., Denesha, J., . . . Wicker, L. S. Investigation of soluble and transmembrane CTLA-4 isoforms in serum and microvesicles.. *J Immunol*, 193(2), 889-900 (2014).

Evangelou, M., Smyth, D. J., Fortune, M. D., Burren, O. S., Walker, N. M., Guo, H., . . . Wallace, C. A method for gene-based pathway analysis using genomewide association study summary statistics reveals nine new type 1 diabetes associations.. *Genet Epidemiol*, 38(8), 661-670 (2014).

Ferner RE, Shaw A, Evans DG, McAleer D, Halliday D, Parry A, Raymond FL, Durie-Gair J, Hanemann CO, Hornigold R, Axon P, Golding JF. Longitudinal evaluation of quality of life in 288 patients with neurofibromatosis 2. *J. Neurol.* 1-7 (2014).

Ferrari R et al. ... St George-Hyslop P ... Momeni P. Frontotemporal dementia and its subtypes: a genome-wide association study. *Lancet Neurol*. 13, 686-699 (2014).

Ferreira RC, Guo H, Coulson RM, Smyth DJ, Pekalski ML, Burren OS, Cutler AJ, Doecke JD, Flint S, McKinney EF, Lyons PA, Smith KG, Achenbach P, Beyerlein A, Dunger DB, Wicker LS, Todd JA, Bonifacio E, Wallace C, Ziegler AG. A type I interferon transcriptional signature precedes autoimmunity in children genetically at-risk of type 1 diabetes. *Diabetes* 63, 2538-2550 (2014).

Fielding CA, Aicheler R, Stanton RJ, Wang EC, Han S, Seirafian S, Davies J, McSharry BP, Weekes MP, Antrobus PR, Prod'homme V, Blanchet FP, Sugrue D, Cuff S, Roberts D, Davison AJ, Lehner PJ, Wilkinson GW, Tomasec P. Two Novel Human Cytomegalovirus NK Cell Evasion Functions Target MICA for Lysosomal Degradation. *PLoS Pathog.* **10**, e1004058 (2014).

Fosby B, Næss S, Hov JR, Traherne J, Boberg KM, Trowsdale J, Foss A, Line PD, Franke A, Melum E, Scott H, Karlsen TH. HLA variants related to primary sclerosing cholangitis influence rejection after liver transplantation. *World J. Gastroenterol.* **20**, 3986-4000 (2014).

Freeman CL, Hesketh G, Seaman MN. RME-8 coordinates the activity of the WASH complex with the function of the retromer SNX dimer to control endosomal tubulation. *J. Cell Sci.* **127**, 2053-2070 (2014).

Futema M, Plagnol V, Li K, Whittall RA, Neil HA, Seed M, Simon Broome Consortium, Bertolini S, Calandra S, Descamps OS, Graham CA, Hegele RA, Karpe F, Durst R, Leitersdorf E, Lench N, Nair DR, Soran H, Van Bockxmeer FM, UK10K Consortium, Humphries SE. Whole exome sequencing of familial hypercholesterolaemia patients negative for LDLR/APOB/PCSK9 mutations. *J. Med. Genet.* **51**, 537-544 (2014).

Galluzzi L et al Rubinsztein DC ... Kroemer G. Essential versus accessory aspects of cell death: recommendations of the NCCD 2015. *Cell Death Diff.* doi: 10.1038/cdd.2014.137 (2014).

Ghani M, Lang AE, Zinman L, Nacmias B, Sorbi S, Bessi V, Tedde A, Tartaglia MC, Surace EI, Sato C, Moreno D, Xi Z, Hung R, Nalls MA, Singleton A, St George-Hyslop P, Rogaeva E. Mutation analysis of patients with neurodegenerative disorders using NeuroX array. *Neurobiol. Aging* doi: 10.1016/j.neurobiolaging.2014.07.038 (2014).

Girardot M, Pecquet C, Chachoua I, Van Hees J, Guibert S, Ferrant A, Knoops L, Baxter EJ, Beer PA, Giraudier S, Moriggl R, Vainchenker W, Green AR, Constantinescu SN. Persistent STAT5 activation in myeloid neoplasms recruits p53 into gene regulation. *Oncogene* 10.1038/onc.2014.60 (2014).

Grozeva D, Carss K, Spasic-Boskovic O, Parker MJ, Archer H, Firth HV, Park SM, Canham N, Holder SE, Wilson M, Hackett A, Field M, Floyd JA, UK10K Consortium, Hurles M, Raymond FL. De novo loss-of-function mutations in SETD5, encoding a methyltransferase in a 3p25 microdeletion syndrome critical region, cause intellectual disability. *Am. J. Hum. Genet.* **94**, 618-624 (2014).

Guglielmelli P, Nangalia J, Green AR, Vannucchi AM. CALR mutations in myeloproliferative neoplasms: Hidden behind the reticulum. *Am. J. Hematol.* **89**, 453-456 (2014).

Gulati, P., Avezov, E., Ma, M., Antrobus, R., Lehner, P., O'Rahilly, S., . . . Yeo, G. S. Fat mass and obesity-related (FTO) shuttles between the nucleus and cytoplasm.. *Biosci Rep*, 34(5). doi:10.1042/BSR20140111 (2014).

Hepburn, L., Prajsnar, T. K., Klapholz, C., Moreno, P., Loynes, C. A., Ogryzko, N. V., . . . Floto, R. A. Innate immunity. A Spaetzle-like role for nerve growth factor β in vertebrate immunity to *Staphylococcus aureus*.. *Science*, 346(6209), 641-646 (2014).

Herold KC, Gitelman SE, Willi SM, Gottlieb PA, Waldron-Lynch F, Devine L, Sherr J, Rosenthal SM, Adi S, Jalaludin MY, Michels AW, Dziura J, Bluestone JA. Teplizumab treatment may improve C-peptide responses in participants with type 1 diabetes after the new-onset period: A randomized controlled trial. *Diabetes Technology and Therapeutics* **16**, (2014).

Hesketh, G. G., Pérez-Dorado, I., Jackson, L. P., Wartosch, L., Schäfer, I. B., Gray, S. R., . . . Owen, D. J. VARP is recruited on to endosomes by direct interaction with retromer, where together they function in export to the cell surface.. *Dev Cell*, **29**(5), 591-606 (2014).

Hiemstra TF, Charles PD, Gracia T, Hester SS, Gatto L, Al-Lamki R, Floto RA, Su Y, Skepper JN, Lilley KS, Karet Frankl FE. Human Urinary Exosomes as Innate Immune Effectors. *J. Am. Soc. Nephrol.* doi: 10.1681/ASN.2013101066 (2014).

Hirst, J., Schlacht, A., Norcott, J. P., Traynor, D., Bloomfield, G., Antrobus, R., . . . Robinson, M. S. Characterization of TSET, an ancient and widespread membrane trafficking complex.. *Elife*, **3**, e02866 (2014).

Homan CC, Kumar R, Nguyen LS, Haan E, Raymond FL, Abidi F, Raynaud M, Schwartz CE, Wood SA, Gecz J, Jolly LA. Mutations in USP9X are associated with X-linked intellectual disability and disrupt neuronal cell migration and growth. *Am. J. Hum. Genet.* **94**, 470-478 (2014).

Huntington JA. Natural inhibitors of thrombin. *Thromb Haemost.* **111**, 583-589 (2014).

Jackson N, Compton E, Trowsdale J, Kelly AP. Recognition of Salmonella by Dectin-1 induces presentation of peptide antigen to type B T cells. *Eur. J. Immunol.* **44**, 962-969 (2014).

Jackson RN, Golden SM, van Erp PB, Carter J, Westra ER, Brouns SJ, van der Oost J, Terwilliger TC, Read RJ, Wiedenheft B. Structural biology. Crystal structure of the CRISPR RNA-guided surveillance complex from *Escherichia coli*. *Science* **345**, 1473-1479 (2014).

Jama GM, Scarci M, Bowden J, Marciniak SJ. Palliative treatment for symptomatic malignant pericardial effusion. *Interact. Cardiovasc. Thorac. Surg.* pii: ivu267 (2014).

Jenkins MR, Stinchcombe JC, Au-Yeung BB, Asano Y, Ritter AT, Weiss A, Griffiths GM. Distinct structural and catalytic roles for Zap70 in formation of the immunological synapse in CTL. *Elife* **3**, e89561 (doi: 10.7554/eLife.01310) (2014).

Jones DC, Peacock S, Hughes D, Traherne JA, Allen RL, Barnardo MC, Friend P, Taylor CJ, Fuggle S, Trowsdale J, Young NT. Killer immunoglobulin-like receptor gene repertoire influences viral load of primary human cytomegalovirus infection in renal transplant patients. *Genes Immun.* doi: 10.1038/gene.2014.53 (2014).

Joshi A, Göttgens B. Concerted bioinformatic analysis of the genome-scale blood transcription factor compendium reveals new control mechanisms. *Mol. Biosyst.* **10**, 2935-2941 (2014).

Kanemoto, S., Griffin, J., Markham-Coultes, K., Aubert, I., Tandon, A., George-Hyslop, P. S., . . . Fraser, P. E. Proliferation, differentiation and amyloid- β production in neural progenitor cells isolated from TgCRND8 mice.. *Neuroscience* **261**, 52-59 (2014).

Kelly BT, Graham SC, Liska N, Dannhauser PN, Höning S, Ungewickell EJ and Owen DJ. AP2 controls clathrin polymerization with a membrane-activated switch. *Science* **345**, 459-463 (2014).

Khabirova, E., Moloney, A., Marciniak, S. J., Williams, J., Lomas, D. A., Oliver, S. G., . . . Crowther, D. C. The TRiC/CCT chaperone is implicated in Alzheimer's disease based on patient GWAS and an RNAi screen in A β -expressing *Caenorhabditis elegans*. *PLoS One* **9**(7), e102985 (2014).

Kochupurakkal NM, Kruger AJ, Tripathi S, Zhu B, Adams LT, Rainbow DB, Rossini A, Greiner DL, Sayegh MH, Wicker LS, Guleria I. Blockade of the programmed death-1 (PD1) pathway undermines potent genetic protection from type 1 diabetes. *PLoS One* **9**, e89561 (2014).

Langdown J, Luddington RJ, Huntington JA, Baglin TP. A hereditary bleeding disorder resulting from a premature stop codon in thrombomodulin (p.Cys537Stop). *Blood* **124**, 1951-1956 (2014).

Lechtenberg BC, Freund SMV, Huntington JA. Gplba interacts exclusively with exosite II of thrombin. *J. Mol. Biol.* **426**, 881-893 (2014).

Le Pape, S., Dimitrova, E., Hannaert, P., Konovalov, A., Volmer, R., Ron, D., . . . Hauet, T. Polynomial algebra reveals diverging roles of the unfolded protein response in endothelial cells during ischemia-reperfusion injury. *FEBS Lett*, **588**(17), 3062-3067 (2014).

Li J, Kent DG, Godfrey AL, Manning H, Nangalia J, Aziz A, Chen E, Saeb-Parsy K, Fink J, Sneade R, Hamilton TL, Pask DC, Silber Y, Zhao X, Ghevaert C, Liu P, Green AR. JAK2V617F-homozygosity drives a phenotypic switch between myeloproliferative neoplasms in a murine model, but is insufficient to sustain clonal expansion. *Blood* 10.1182/blood-2013-06-510222 (2014).

Li Y, Lu SH-J, Tsai C-J, Bohm C, Qamar S, Dodd RB, Meadows W, Jeon A, McLeod A, Chen F, Arimon M, Berezovska O, Hyman BT, Tomita T, Iwatsubo T, Johnson CM, Farrer LA, Schmitt-Ulms G, Fraser PE, St George-Hyslop PH. Structural interactions between inhibitor and substrate docking sites give insight into mechanisms of human PS1 complexes. *Structure* **22**, 125-135 (2014).

Lin, Y., Huang, G., Jamison, S., Li, J., Harding, H. P., Ron, D., . . . Lin, W. PERK activation preserves the viability and function of remyelinating oligodendrocytes in immune-mediated demyelinating diseases.. *Am J Pathol*, **184**(2), 507-519 (2014).

Lin Y, Pang X, Huang G, Jamison S, Fang J, Harding HP, Ron D, Lin W. Impaired Eukaryotic Translation Initiation Factor 2B Activity Specifically in Oligodendrocytes Reproduces the Pathology of Vanishing White Matter Disease in Mice. *J. Neurosci.* **34**, 12182-12191 (2014).

Linterman, M. A., Denton, A. E., Clare, S., Kane, L., Dougan, G., Espeli, M., . . . Smith, K. G. C. CD28 expression is required after T cell priming for helper T cell responses and protective immunity to infection. *Immunology* **143**, 63 (2014).

Liu, H., Huang, L., Bradley, J., Liu, K., Bardhan, K., Ron, D., . . . McGaha, T. L. GCN2-dependent metabolic stress is essential for endotoxemic cytokine induction and pathology.. *Mol Cell Biol*, **34**(3), 428-438 (2014).

López-Àlvarez MR, Jones DC, Jiang W, Traherne JA, Trowsdale J. Copy number and nucleotide variation of the LILR family of myelomonocytic cell activating and inhibitory receptors. *Immunogenetics* **66**, 73-83 (2014).

Luzio, J. P., Hackmann, Y., Dieckmann, N. M., & Griffiths, G. M. The biogenesis of lysosomes and lysosome-related organelles. *Cold Spring Harb Perspect Biol*, **6**(9), a016840 (2014).

Mahata B, Zhang X, Kolodziejczyk AA, Proserpio V, Haim-Vilmovsky L, Taylor AE, Hebenstreit D, Dingler FA, Moignard V, Göttgens B, Arlt W, McKenzie AN, Teichmann SA. Single-Cell RNA Sequencing Reveals T Helper Cells Synthesizing Steroids De Novo to Contribute to Immune Homeostasis. *Cell Rep*. doi: 10.1016/j.celrep.2014.04.011 (2014).

Marciniak SJ, Lomas DA. Genetic Susceptibility. *Clinics in Chest Medicine* **35**, 29-38 (2014).

Matheson, N. J., Peden, A. A., & Lehner, P. J. Antibody-Free Magnetic Cell Sorting of Genetically Modified Primary Human CD4+ T Cells by One-Step Streptavidin Affinity Purification.. *PLoS One*, 9(10), e111437 (2014).

McKinney EF, Willcocks LC, Broecker V, Smith KG. The immunopathology of ANCA-associated vasculitis. *Semin. Immunopathol.* **36**, 461-478 (2014).

Meazza, R., Tuberosa, C., Cetica, V., Falco, M., Parolini, S., Grieve, S., . . . Pende, D. Diagnosing XLP1 in patients with hemophagocytic lymphohistiocytosis. *Journal of Allergy and Clinical Immunology* 134, 1381-1387.e7 (2014).

Menzies FM, Garcia-Arencibia M, Imarisio S, O'Sullivan NC, Ricketts T, Kent BA, Rao MV, Lam W, Green-Thompson ZW, Nixon RA, Saksida LM, Bussey TJ, O'Kane CJ, Rubinsztein DC. Calpain inhibition mediates autophagy-dependent protection against polyglutamine toxicity. *Cell Death Differ.* doi: 10.1038/cdd.2014.151 (2014).

Michel, C. H., Kumar, S., Pinotsi, D., Tunnacliffe, A., St George-Hyslop, P., Mandelkow, E., . . . Kaminski Schierle, G. S. Extracellular monomeric tau protein is sufficient to initiate the spread of tau protein pathology. *J Biol Chem*, 289(2), 956-967 (2014).

Mirshekar-Syahkal B, Fitch SR, Ottersbach K. From greenhouse to garden: The changing soil of the hematopoietic stem cell microenvironment during development. *Stem Cells* doi: 10.1002/stem.1680 (2014).

Moignard V, Göttgens B. Transcriptional mechanisms of cell fate decisions revealed by single cell expression profiling. *Bioessays* **36**, 419-426 (2014).

Moreau K, Fleming A, Imarisio S, Lopez Ramirez A, Mercer JL, Jimenez-Sanchez M, Bento CF, Puri C, Zavodszky E, Siddiqi F, Lavau CP, Betton M, O'Kane CJ, Wechsler DS, Rubinsztein DC. PICALM modulates autophagy activity and tau accumulation. *Nature Commun.* 5:4998. doi: 10.1038/ncomms5998 (2014).

Naj AC et al. ... St George-Hyslop PH ... Pericak-Vance MA, and the Alzheimer Disease Genetics Consortium. Effects of Multiple Genetic Loci on Age at Onset in Late-Onset Alzheimer Disease: A Genome-Wide Association Study. *JAMA Neurol.* doi: 10.1001/jamaneurol.2014.1491 (2014).

Narayan P, Holmström KM, Kim DH, Whitcomb DJ, Wilson MR, St George-Hyslop P, Wood NW, Dobson CM, Cho K, Abramov AY, Klenerman D. Rare Individual Amyloid- β Oligomers Act on Astrocytes to Initiate Neuronal Damage. *Biochemistry* **53**, 2442-2453 (2014).

Ong SG, Lee WH, Theodorou L, Kodo K, Lim SY, Shukla DH, Briston T, Kiriakidis S, Ashcroft M, Davidson SM, Maxwell PH, Yellon DM, Hausenloy DJ. HIF-1 reduces ischaemia-reperfusion injury in the heart by targeting the mitochondrial permeability transition pore. *Cardiovasc. Res.* **104**, 24-36 (2014).

Onoufriadis A, Shoemark A, Munye MM, James CT, Schmidts M, Patel M, Rosser EM, Bacchelli C, Beales PL, Scambler PJ, Hart SL, Danke-Roelse JE, Sloper JJ, Hull S, Hogg C, Emes RD, Pals G, Moore AT, Chung EM, UK10K, Mitchison HM. Combined exome and whole-genome sequencing identifies mutations in ARMC4 as a cause of primary ciliary dyskinesia with defects in the outer dynein arm. *J. Med. Genet.* **51**, 61-67 (2014).

Onoufriadis A, Shoemark A, Schmidts M, Patel M, Jimenez G, Liu H, Thomas B, Dixon M, Hirst RA, Rutman A, Burgoyne T, Williams C, Scully J, Bolard F, Lafitte JJ, Beales PL, Hogg C, Yang P, Chung EM, Emes RD, O'Callaghan C, UK10K, Bouvagnet P, Mitchison HM. Targeted NGS gene panel identifies mutations in RSPH1 causing primary ciliary dyskinesia and a common mechanism for ciliary central pair agenesis due to radial spoke defects. *Hum. Mol. Genet.* **23**, 3362-3374 (2014).

Pellicano F, Scott MT, Helgason GV, Hopcroft LE, Allan EK, Aspinall-O'Dea M, Copland M, Pierce A, Huntly BJ, Whetton AD, Holyoake TL. The anti-proliferative activity of kinase inhibitors in chronic myeloid leukaemia cells is mediated by FOXO transcription factors. *Stem Cells* doi: 10.1002/stem.1748 (2014).

Petersen N, Reimann F, Bartfeld S, Farin HF, Ringnald FC, Vries RG, van den Brink S, Clevers H, Gribble FM, de Koning EJ. Generation of L cells in mouse and human small intestine organoids. *Diabetes* **63**, 410-420 (2014).

Placke T, Faber K, Nonami A, Putwain SL, Salih HR, Heidel FH, Krämer A, Root DE, Barbie DA, Krivtsov AV, Armstrong SA, Hahn WC, Huntly BJ, Sykes SM, Milsom MD, Scholl C, Fröhling S. Requirement for CDK6 in MLL-rearranged acute myeloid leukemia. *Blood* 10.1182/blood-2014-02-558114 (2014).

Pomowski A, Ustok FI, Huntington JA. Homology model of human prothrombinase based on the crystal structure of Pseutarin C. *Biol. Chem.* **395**, 1233-1241 (2014).

Pontikos N, Smyth DJ, Schuilenburg H, Howson JM, Walker NM, Burren OS, Guo H, Onengut-Gumuscu S, Chen WM, Concannon P, Rich SS, Jayaraman J, Jiang W, Traherne JA, Trowsdale J, Todd JA, Wallace C. A hybrid qPCR/SNP array approach allows cost efficient assessment of KIR gene copy numbers in large samples. *BMC Genomics* **15**, 274 (2014).

Prick J, de Haan G, Green AR, Kent DG. Clonal heterogeneity as a driver of disease variability in the evolution of myeloproliferative neoplasms. *Experimental Hematology* doi: 10.1016/j.exphem.2014.07.268 (2014).

Puri, C., Renna, M., Bento, C. F., Moreau, K., & Rubinsztein, D. C. ATG16L1 meets ATG9 in recycling endosomes: additional roles for the plasma membrane and endocytosis in autophagosome biogenesis. *Autophagy*, *10*(1), 182-184 (2014).

Qi X, Chan WL, Read RJ, Zhou A, Carrell RW. Temperature-responsive release of thyroxine and its environmental adaptation in Australians. *Proc. Biol. Sci.* doi: 10.1098/rspb.2013.2747 (2014).

Rintoul RC, Rassi DM, Maskell N, Gittins J, Szlosarek PW, Kerr KM, Booton R, Hughes V, Fennell DA, Marciniak SJ. Mesobank - a UK based bioresource for malignant mesothelioma. *Lung Cancer* **83**, S82 (2014).

Roberts CH, Jiang W, Jayaraman J, Trowsdale J, Holland MJ, Traherne JA. Killer-cell Immunoglobulin-like Receptor gene linkage and copy number variation analysis by droplet digital PCR. *Genome Med.* **6**, 20 (2014).

Scotter EL, Vance C, Nishimura AL, Lee YB, Chen HJ, Urwin H, Sardone V, Mitchell JC, Rogelj B, Rubinsztein DC, Shaw CE. Differential roles of the ubiquitin proteasome system and autophagy in the clearance of soluble and aggregated TDP-43 species. *J. Cell Sci.* **127**, 1263-1278 (2014).

Seaman, M. N. J., & Freeman, C. L. Analysis of the Retromer complex-WASH complex interaction illuminates new avenues to explore in Parkinson disease.. *Commun Integr Biol*, *7*, e29483 (2014).

Segovia M, Louvet C, Charnet P, Savina A, Tilly G, Gautreau L, Carretero-Iglesia L, Beriou G, Cebrian I, Cens T, Hepburn L, Chiffolleau E, Floto RA, Anegon I, Amigorena S, Hill M, Cuturi MC. Autologous dendritic cells prolong allograft survival through tmem176b-dependent antigen cross-presentation. *Am. J. Transplant* **14**, 1021-1031 (2014).

Seguin SJ, Morelli FF, Vinet J, Amore D, De Biasi S, Poletti A, Rubinsztein DC, Carra S. Inhibition of autophagy, lysosome and VCP function impairs stress granule assembly. *Cell Death Differ.* doi: 10.1038/cdd.2014.103 (2014).

Shah AV, Birdsey GM, Reynolds LE, Dufton N, Almagro LO, Yang Y, Aspalter IM, Khan ST, Mason JC, Dejana E, Göttgens B, Hodivala-Dilke K, Gerhardt H, Adams RH, Randi AM. The endothelial transcription factor ERG promotes vascular stability and growth through Wnt/beta-catenin signalling. *Angiogenesis* **17**, 715 (2014).

Sieni E, Cetica V, Hackmann Y, Coniglio ML, Da Ros M, Ciambotti B, Pende D, Griffiths G, Aricò M. Familial Hemophagocytic Lymphohistiocytosis: When Rare Diseases Shed Light on Immune System Functioning. *Front Immunol.* **5**, 167 (2014).

Sive JI, Göttgens B. Transcriptional network control of normal and leukaemic haematopoiesis. *Exp. Cell Res.* doi: 10.1016/j.yexcr.2014.06.021 (2014).

Sliwiak J, Jaskolski M, Dauter Z, McCoy AJ, Read RJ. Likelihood-based molecular-replacement solution for a highly pathological crystal with tetartohedral twinning and sevenfold translational noncrystallographic symmetry. *Acta Crystallogr. D. Biol. Crystallogr.* **70**, 471-480 (2014).

Stanton RJ, Prod'homme V, Purbhoo MA, Moore M, Aicheler RJ, Heinzmann M, Bailer SM, Haas J, Antrobus R, Weekes MP, Lehner PJ, Vojtesek B, Miners KL, Man S, Wilkie GS, Davison AJ, Wang EC, Tomasec P, Wilkinson GW. HCMV pUL135 Remodels the Actin Cytoskeleton to Impair Immune Recognition of Infected Cells. *Cell Host Microbe* **16**, 201-214 (2014).

Steele JW, Brautigam H, Short JA, Sowa A, Shi M, Yadav A, Weaver CM, Westaway D, Fraser PE, St George-Hyslop PH, Gandy S, Hof PR, Dickstein DL. Early fear memory defects are associated with altered synaptic plasticity and molecular architecture in the TgCRND8 Alzheimer's disease mouse model. *J. Comp. Neurol.* **522**, 2319-2335 (2014).

Stinchcombe, J. C., & Griffiths, G. M. Communication, the centrosome and the immunological synapse. *Philos Trans R Soc Lond B Biol Sci*, 369(1650) (2014).

Su Y, Al-Lamki RS, Blake-Palmer KG, Best A, Golder ZJ, Zhou A, Karet Frankl FE. Physical and Functional Links between Anion Exchanger-1 and Sodium Pump. *J. Am. Soc. Nephrol.* pii: ASN.2013101063 (2014).

Sun D, Luo M, Jeong M, Rodriguez B, Xia Z, Hannah R, Wang H, Le T, Faull KF, Chen R, Gu H, Bock C, Meissner A, Göttgens B, Darlington GJ, Li W, Goodell MA. Epigenomic Profiling of Young and Aged HSCs Reveals Concerted Changes during Aging that Reinforce Self-Renewal. *Cell Stem Cell* **14**, 673-688 (2014).

Tan L, Dickens JA, Demeo DL, Miranda E, Perez J, Rashid ST, Day J, Ordoñez A, Marciniak SJ, Haq I, Barker AF, Campbell EJ, Eden E, McElvaney NG, Rennard SI, Sandhaus RA, Stocks JM, Stoller JK, Strange C, Turino G, Rouhani FN, Brantly M, Lomas DA. Circulating polymers in α 1-antitrypsin deficiency. *Eur. Respir. J.* **43**, 1501-1504 (2014).

Thompson WS, Pekalski ML, Simons HZ, Smyth DJ, Castro-Dopico X, Guo H, Guy C, Dunger DB, Arif S, Peakman M, Wallace C, Wicker LS, Todd JA, Ferreira RC. Multi-parametric flow cytometric and genetic investigation of the peripheral B-cell compartment in human type 1 diabetes. *Clin. Exp. Immunol.* doi: 10.1111/cei.12362 (2014).

Todd JA. Constitutive antiviral immunity at the expense of autoimmunity. *Immunity* **40**, 167-169 (2014).

Tsunoda, S., Avezov, E., Zyranova, A., Konno, T., Mendes-Silva, L., Pinho Melo, E., Harding, H.P. and Ron, D. Intact protein folding in the glutathione-depleted endoplasmic reticulum implicates alternative protein thiol reductants. *Elife* 3:e03421. doi: 10.7554/eLife.03421 (2014).

van den Boomen DJ, Timms RT, Grice GL, Stagg HR, Skødt K, Dougan G, Nathan JA and Lehner PJ. TMEM129 is a Derlin-1 associated ERAD E3 ligase essential for virus-induced degradation of MHC-I. *Proc. Natl Acad. Sci. USA* **111**, 11425-11430 (2014).

van 't Wout EF, Hiemstra PS, Marciniak SJ. The Integrated Stress Response in Lung Disease. *Am. J. Respir. Cell. Mol. Biol.* doi: 10.1165/rcmb.2014-0019TR (2014).

van Galen P, Kreso A, Mbong N, Kent DG, Fitzmaurice T, Chambers JE, Xie S, Laurenti E, Hermans K, Eppert K, Marciniak SJ, Goodall JC, Green AR, Wouters BG, Wienholds E, Dick JE. The unfolded protein response governs integrity of the haematopoietic stem-cell pool during stress. *Nature* doi: 10.1038/nature13228 (2014).

Wallin EF, Jolly EC, Suchanek O, Bradley JA, Espéli M, Jayne DR, Linterman MA, Smith KG. Human T follicular helper and T follicular regulatory cell maintenance is independent of germinal centers. *Blood* pii: blood-2014-07-585976 (2014).

Weekes, M. P., Tomasec, P., Huttlin, E. L., Fielding, C. A., Nusinow, D., Stanton, R. J., . . . Gygi, S. P. Quantitative temporal viromics: an approach to investigate host-pathogen interaction.. *Cell*, **157**(6), 1460-1472 (2014).

Williamson KA, Rainger J, Floyd JA, Ansari M, Meynert A, Aldridge KV, Rainger JK, Anderson CA, Moore AT, Hurles ME, Clarke A, van Heyningen V, Verloes A, Taylor MS, Wilkie AO, UK10K Consortium, Fitzpatrick DR. Heterozygous loss-of-function mutations in YAP1 cause both isolated and syndromic optic fissure closure defects. *Am. J. Hum. Genet.* **94**, 295-302 (2014).

Wilkinson AC, Kawata VK, Schütte J, Gao X, Antoniou S, Baumann C, Woodhouse S, Hannah R, Tanaka Y, Swiers G, Moignard V, Fisher J, Hidetoshi S, Tijssen MR, de Bruijn MF, Liu P, Gottgens B. Single-cell analyses of regulatory network perturbations using enhancer-targeting TALEs suggest novel roles for PU.1 during haematopoietic specification. *Development* doi:10.1242/dev.115709 (2014).

Zavodszky E, Seaman MN, Moreau K, Jimenez-Sanchez M, Breusegem SY, Harbour ME, Rubinsztein DC. Mutation in VPS35 associated with Parkinson's disease impairs WASH complex association and inhibits autophagy. *Nature Comm.* **5**, 3828 doi: 10.1038/ncomms4828 (2014).