

Report of the President 2008/2009

Sep 2008 - Aug 2009

Research Publications for Conway Institute

Professor Mohamed Al-Rubeai

Book Chapters

Browne S. M. and Al-Rubeai M. (2009) 'Selection Methods for High-Producing Mammalian Cell Lines' In: *Cell Engineering: Cell Line development* . Berlin: Springer.

Melero-Martin J. M., Santhalingam S., Al-Rubeai M. (2009) 'Methodology for optimal in vitro cell expansion in tissue engineering' In: *Bioreactor Systems for Tissue Engineering* . Berlin: Springer-Verlag.

<http://springerlink.com/content/07158vu7000752u0/fulltext.pdf>

Books Edited

M. Al-Rubeai (Ed.). (2009) *Cell Engineering Vol. 6: Cell Line Development* . Springer.

Peer Reviewed Journals

Sandhu K. S. and Al-Rubeai M. (2009) 'The effect of Bcl-2, YAMA, and XIAP over-expression on apoptosis and adenovirus production in HEK293 cell line'. *Biotechnology and Bioengineering*, 104 :752-765.

Boehm D., Murphy W. G. and Al-Rubeai M (2009) 'The potential of human peripheral blood derived CD34+ cells for ex vivo red blood cell production'. *Journal of Biotechnology* .

Woolley J. F. and Al-Rubeai M (2009) 'The isolation and identification of a secreted biomarker associated with cell stress in serum-free CHO cell culture. Biotechnology and Bioengineering'. *Biotechnology and Bioengineering*, 104 :590-600.

Kuystermans D. and Al-Rubeai M. (2009) 'cMyc increases cell number through uncoupling of cell division from cell size in CHO cells'. *BMC Biotechnology*, 9 . <http://www.biomedcentral.com/1472-6750/9/76>

Woolley J. F. and Al-Rubeai M (2009) 'The application of SELDI-TOF mass spectrometry to mammalian cell culture'. *Biotechnology Advances*, 104 :590-600.

Khoo S. H. G. and Al-Rubeai M. (2009) 'Metabolic characterization of a hyper-productive state in an antibody producing NS0 myeloma cell line'. *Metabolic Engineering*, 11 :199-211.

Khoo S. H. G. and Al-Rubeai M. (2009) 'Detailed understanding of enhanced specific antibody productivity in NS0 myeloma cells'. *Biotechnology and Bioengineering*, 102 :188-199.

Conference Publications

Boehm D., Murphy W. G. and Al-Rubeai M. (2009) The effect of cell crowdedness on ex vivo erythropoiesis of peripheral blood derived CD34+ cells *Human pluripotent stem cells symposium* , Dublin,

Al-Rubeai M. (2009) Life, stress and death in the bioreactor *Cell Line Development and Engineering* ,

Krampe, B. and Al-Rubeai, M. (2009) The Influence of the microenvironment on cell expansion, maturation and viability in ex vivo erythropoiesis of peripheral blood derived CD34+ cells *19th European Society for Animal Cell Culture (ESACT-UK) Annual Meeting* , Hinxton,

Boehm D., Murphy W. G. and Al-Rubeai M. (2009) The Influence of the microenvironment on cell expansion, maturation and viability in ex vivo erythropoiesis of peripheral blood derived CD34+ cells *19th European Society for Animal Cell Culture (ESACT-UK) Annual Meeting* , Hinxton,

Al-Rubeai M. (2008) Cell engineering strategy to improve stability, adaptation and growth of cell lines for bioproduction *IV National Congress of Bioengineering, Izmir, Turkey* ,

Krampe B. and Al-Rubeai M. (2008) Transcriptome analysis of antibody producing NS0 cells in chemostat and perfusion cultures *7th European Symposium on Biochemical Engineering Science (ESBES7)* ,

Boehm D., Murphy W., Al-Rubeai M. (2008) Ex-vivo production of human red blood cells from peripheral blood derived CD34+ cells *Stem Cells Europe* ,

Professor Alan Baird

Peer Reviewed Journals

Winter DC, Hogan AM, Collins D, Baird AW, (2009) 'Estrogen and gastrointestinal malignancy'. *Molecular and cellular endocrinology*, 1-2 (NA):19-24.

Winter DC, Hogan AM, Kennelly R, Collins D, Baird AW, (2009) 'Oestrogen inhibits human colonic motility by a non-genomic cell membrane receptor-dependent mechanism'. *The British Journal of Surgery*, 7 (NA):817-822.

O'Farrelly C, Nemeth E, Baird AW, (2009) 'Microanatomy of the liver immune system'. *Seminars in immunopathology* .

Winter DC, Hogan AM, Gallagher TK, Rory K, Baird AW, (2009) 'Gastric applications of electrical field stimulation'. *Surgical laparoscopy, endoscopy & percutaneous techniques*, 2 (NA):85-89.

Winter DC, Gallagher TK, Baird AW, (2009) 'Constitutive basal and stimulated human small bowel contractility is enhanced in obesity'. *Annals of surgical innovation and research*, (NA).

Irwin JA, Ryan MT, Baird AW, Mulholland CW, (2009) 'Practical classes: a platform for deep learning? Overall context in the first-year veterinary curriculum'. *Journal of veterinary medical education*, 2 (NA):180-185.

Keely SJ, Baird AW, Skelly MM, O'Donoghue DP, Barrett KE, (2008) 'Bradykinin regulates human colonic ion transport in vitro'. *British journal of pharmacology*, 155 (4):558-566.

Dr John Andrew Baugh

Peer Reviewed Journals

Merk M, Baugh J, Zierow S, Leng L, Pal U, Lee SJ, Ebert AD, Mizue Y, Trent JO, Mitchell R, Nickel W, Kavathas PB, Bernhagen J, Bucala R (2009) 'The Golgi-associated protein p115 mediates the secretion of macrophage migration inhibitory factor'. *Journal of Immunology* .

Martos R, Baugh J, Ledwidge M, O'Loughlin C, Murphy NF, Conlon C, Patle A, Donnelly SC, McDonald K (2009)

'Diagnosis of heart failure with preserved ejection fraction: improved accuracy with the use of markers of collagen turnover'. *European Journal of Heart Failure* .

Dr Orina Belton

Peer Reviewed Journals

Belton O, McClelland S, Gawaz M, Kennerknecht E, Konrad CS, Sauer S, Schuerzinger K, Massberg S, Fitzgerald DJ, (2009) 'Contribution of cyclooxygenase-1 to thromboxane formation, platelet-vessel wall interactions and atherosclerosis in the ApoE null mouse'. *Atherosclerosis*, 202 (1):84-91.

Dr Oliver Blacque

Peer Reviewed Journals

Bialas NJ, Inglis PN, Li C, Robinson JF, Parker JD, Healey MP, Davis EE, Inglis CD, Toivonen T, Cottell DC, Blacque OE, Quarmby LM, Katsanis N, Leroux MR. (2009) 'Functional interactions between the ciliopathy-associated Meckel syndrome 1(MKS1) protein and two novel MKS1-related (MKSR) proteins'. *Journal of Cell Science*, 122 (5):611-624.

Dr Billy Bourke

Peer Reviewed Journals

Bourke B, Rowland M, Fleming P, (2009) 'Looking in the mouth for Crohn's disease'. *Inflammatory bowel diseases* .

Professor David Brayden

Peer Reviewed Journals

Jones, M., Mantovani, G., Ryan, S. M., Wang, X., Brayden, D. J., & Haddleton, D. M. (2009) 'Phosphine-mediated one-pot thiol-ene click approach to polymer-protein conjugates'. *Chemical Communications*, 35 :5272-5274.
http://preview.ncbi.nlm.nih.gov/pubmed/19707643?itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVDocSum&ordinalpos=3

Sayers, C.T., Mantovani, G., Ryan, S. M., Randev, R.K., Keiper, O., Leszczyszyn, O. I., Blindauer, C., Brayden, D. J., & Haddleton, D. M. (2009) 'Site-specific N-terminus conjugation of poly(mPEG1100) methacrylates to salmon calcitonin: synthesis and preliminary biological evaluation. Site-specific N-terminus conjugation of poly(mPEG1100) methacrylates to salmon calcitonin: synthesis and preliminary biological evaluation'. *Soft Matter*, 5 :3038-3038.

Callanan JJ, Fletcher NF, Bexiga MG, Brayden DJ, Brankin B, Willett BJ, Hosie MJ, Jacque JM, (2009) 'Lymphocyte migration through the blood brain barrier (BBB) in feline immunodeficiency virus infection is significantly influenced by the pre-existence of virus and TNF-alpha within the CNS: studies using an in vitro feline BBB model'. *Neuropathology and applied neurobiology* .

Brayden DJ, Ryan SM, Wang X, Mantovani G, Sayers CT, Haddleton DM, (2009) 'Conjugation of salmon calcitonin to a combed-shaped end functionalized poly(poly(ethylene glycol) methyl ether methacrylate) yields a bioactive stable conjugate'. *Journal of controlled release : official journal of the Controlled Release Society*, 135 (1):51-59.

Brayden DJ, Keely S, Ryan SM, Haddleton DM, Limer A, Mantovani G, Murphy EP, Colgan SP, (2009) 'Dexamethasone-pDMAEMA polymeric conjugates reduce inflammatory biomarkers in human intestinal epithelial

monolayers'. *Journal of controlled release : official journal of the Controlled Release Society*, 135 (1):35-43.

Brayden DJ, Feighery LM, Smith P, O'Mahony L, Fallon PG, (2008) 'Effects of *Lactobacillus salivarius* 433118 on intestinal inflammation, immunity status and in vitro colon function in two mouse models of inflammatory bowel disease'. *Digestive diseases and sciences*, 53 (9):2495-2506.

Conference Publications

Ryan, SM, McMorrow, J., Murphy, E.P. & Brayden, D. J. (2009) Salmon calcitonin as a potential therapeutic for osteoarthritis and rheumatoid arthritis *36th Int. Soc. Controlled Release Society, Copenhagen* , Abstract 450

Bzik, V & Brayden DJ (2009) Permeating-enhancing and cytotoxic effects of 1-phenyl piperazine in rat colonic mucosa *36th Int. Soc. Controlled Release Society* , Abstract 703

Wang, X & Brayden, D.J. (2009) Bone regeneration after acute injected bisphosphonate and calcitonin repeated treatments in overiectomised rats *Osteoporosis Conference 2009, Manchester* , Supplement 4, S2

Dr Lorraine Brennan

Peer Reviewed Journals

4. Baccini M, Bachmaier EM, Biggeri A, Boekschoten MV, Bouwman FG, Brennan L, Caesar R, Cinti S, Coort SL, Crosley K, Daniel H, Drevon CA, Duthie S, Eijssen L, Elliott RM, van Erk M, Evelo C, Gibney M, Heim C, Horgan GW, Johnson IT, Kelder T, Kleemann R, Kooistra T, van Iersel MP, Mariman EC, Mayer C, McLoughlin G, Müller M, Mulholland F, van Ommen B, Polley AC, Pujos-Guillot E, Rubio-Aliaga I, Roche HM, de Roos B, Sailer M, Tonini G, Williams LM, de Wit N; For the NuGO PPS Team. (2008) 'The NuGO proof of principle study package: a collaborative research effort of the European Nutrigenomics Organisation'. *Genes & Nutrition*, 3 .

Brennan L, (2008) 'Session 2: Personalised nutrition. Metabolomic applications in nutritional research'. *The Proceedings of the Nutrition Society*, 67 (4):404-408.

Turner DL, Paixalfo VB, Salgueiro CA, Brennan L, Reid GA, Chapman SK, (2008) 'The Solution Structure of a Tetraheme Cytochrome from *Shewanella frigidimarina* Reveals a Novel Family Structural Motif'. *Biochemistry* .

Professor Geraldine Butler

Peer Reviewed Journals

Butler G, Rasmussen MD, Lin MF, Santos MA, Sakthikumar S, Munro CA, Rheinbay E, Grabherr M, Forche A, Reedy JL, Agrafioti I, Arnaud MB, Bates S, Brown AJ, Brunke S, Costanzo MC, Fitzpatrick DA, de Groot PW, Harris D, Hoyer LL, Hube B, Klis FM, Kodira C, Lennard N, Logue ME, Martin R, Neiman AM, Nikolaou E, Quail MA, Quinn J, Santos MC, Schmitzberger FF, Sherlock G, Shah P, Silverstein KA, Skrzypek MS, Soll D, Staqq R, Stansfield I, Stumpf MP, Sudbery PE, Srikantha T, Zeng Q, Berman J, Berriman M, Heitman J, Gow NA, Lorenz MC, Birren BW, Kellis M, Cuomo CA. (2009) 'Evolution of pathogenicity and sexual reproduction in eight *Candida* genomes'. *Nature*, 459 :657-662.

Dr Gerard Cagney

Peer Reviewed Journals

Cagney G, Wong JW, McRedmond JP, (2009) 'Activity profiling of platelets by chemical proteomics'. *Proteomics*, 9

(1):40-50.

Shields DC, Casey FP, Cagney G, Krogan NJ, (2008) 'Optimal stepwise experimental design for pairwise functional interaction studies'. *Bioinformatics* .

Shields DC, Casey FP, Cagney G, Krogan NJ, (2008) 'Optimal stepwise experimental design for pairwise functional interaction studies'. *Bioinformatics*, (NA).

Professor Sean Callanan

Peer Reviewed Journals

Callanan JJ, Nolan CM, O'Sullivan FM, Brabazon DC, (2009) 'Genomic imprinting in *Canis familiaris*'. *Reproduction in Domestic Animals*, 44 Suppl 2 :16-21.

O'Farrelly C, Chapwanya A, Meade KG, Doherty ML, Callanan JJ, Mee JF, (2009) 'Histopathological and molecular evaluation of Holstein-Friesian cows postpartum: toward an improved understanding of uterine innate immunity'. *Theriogenology*, 71 (9):1396-1407.

O'Farrelly C, Shaughnessy RG, Meade KG, Cahalane S, Allan B, Reiman C, Callanan JJ, (2009) 'Innate immune gene expression differentiates the early avian intestinal response between *Salmonella* and *Campylobacter*'. *Veterinary Immunology and Immunopathology* .

Mally A, Sieber M, Hoffmann D, Adler M, Vaidya VS, Clement M, Bonventre JV, Zidek N, Rached E, Amberg A, Callanan JJ, Dekant W, (2009) 'Comparative analysis of novel noninvasive renal biomarkers and metabonomic changes in a rat model of gentamicin nephrotoxicity'. *Toxicological sciences : an official journal of the Society of Toxicology*, 109 (2):336-349.

McLean WH, Fallon PG, Sasaki T, Sandilands A, Campbell LE, Saunders SP, Mangan NE, Callanan JJ, Kawasaki H, Shiohama A, Kubo A, Sundberg JP, Presland RB, Fleckman P, Shimizu N, Kudoh J, Irvine AD, Amagai M, (2009) 'A homozygous frameshift mutation in the mouse *Flg* gene facilitates enhanced percutaneous allergen priming'. *Nature Genetics*, 41 (5):602-608.

Callanan JJ, Fletcher NF, Bexiga MG, Brayden DJ, Brankin B, Willett BJ, Hosie MJ, Jacque JM, (2009) 'Lymphocyte migration through the blood brain barrier (BBB) in feline immunodeficiency virus infection is significantly influenced by the pre-existence of virus and TNF-alpha within the CNS: studies using an in vitro feline BBB model'. *Neuropathology and applied neurobiology* .

Duggan V, Bryan J, Puggioni A, McAllister H, Callanan J, Katz L, (2009) 'Thrombosis of the pulmonary artery in a yearling thoroughbred colt'. *Journal of Veterinary Internal Medicine*, 23 (1):215-219.

Gallagher WM, Mulrane L, Rexhepaj E, Penney S, Callanan JJ, (2008) 'Automated image analysis in histopathology: a valuable tool in medical diagnostics'. *EXPERT REV MOL DIAGN*, 8 (6):707-725.

Nally JE, Monahan AM, Callanan JJ, (2008) 'Proteomic analysis of *Leptospira interrogans* shed in urine of chronically infected hosts'. *Infection and Immunity*, 76 (11):4952-4958.

Dr Marguerite Clyne

Book Chapters

Stephen Carrington, Marguerite Clyne, Colm Reid, Eammon Fitzpatrick and Anthony Corfield (2009) 'Microbial

interaction with mucus and mucins' In: *Microbial Glycobiology* . United States of America: Academic Press.

Peer Reviewed Journals

Bourke B, Corcionivoschi N, Clyne M, Lyons A, Elmi A, Gundogdu O, Wren BW, Dorrell N, Karlyshev AV, (2009) 'Campylobacter jejuni cocultured with epithelial cells reduces surface capsular polysaccharide expression'. *Infection and Immunity*, 77 (5):1959-1967.

Clyne M, Reeves EP, Ali T, Leonard P, Hearty S, O'Kennedy R, May FE, Westley BR, Josenhans C, Rust M, Suerbaum S, Smith A, Drumm B, (2008) 'Helicobacter pylori Lipopolysaccharide Interacts With TFF1 in a pH-Dependent Manner'. *Gastroenterology* .

Dr John Crean

Peer Reviewed Journals

Godson C, Murphy M, Crean J, Brazil DP, Sadlier D, Martin F, (2008) 'Regulation and consequences of differential gene expression in diabetic kidney disease'. *Biochemical Society transactions*, Pt 5 (NA):941-945.

Conference Publications

Godson C, Murphy M, Crean J, Brazil DP, Sadlier D, Martin F, (2008) Biochemical Society transactions *Regulation and consequences of differential gene expression in diabetic kidney disease* , 941 - 945

Dr Paul Crossey

Peer Reviewed Journals

Duncan ER, Crossey PA, Walker S, Anilkumar N, Poston L, Douglas G, Ezzat VA, Wheatcroft SB, Shah AM, Kearney MT (2008) 'Effect of endothelium-specific insulin resistance on endothelial function in vivo'. *Diabetes*, 57 (12):3307-3314.

Professor Mark Crowe

Peer Reviewed Journals

Cavestany D, Viñoles C, Crowe MA, La Manna A and Mendoza A (2009) 'Effect of prepartum diet on postpartum ovarian activity in Holstein cows in a pasture-based dairy system'. *Animal Reproduction Science*, 114 :1-13.

Piebes AHG, van de Griend B, Rijnders MJW, de Vries IJR, van der Weijden GC, Crowe MA and Gruys E (2009) 'Subacute ruminal acidosis, claw problems and infertility in (high producing) milk cows (article in Dutch)'. *Tijdschr Diergeneeskd*, 134 :486-490.

Crowe MA, Lane EA, Sweeney T, Ryan M, Roche JF, (2009) 'Relationship between serum gonadotropins and pituitary immunoreactive gonadotropins and steroid receptors during the first FSH increase of the estrous cycle and following steroid treatment in heifers'. *Animal Reproduction Science*, 1-2 (NA):66-82.

Crowe MA, Beltman ME, Lonergan P, Diskin MG, Roche JF, (2009) 'Effect of progesterone supplementation in the first

week post conception on embryo survival in beef heifers'. *Theriogenology*, 71 (7):1173-1179.

MA Crowe (2008) 'Resumption of ovarian cyclicity in post-partum beef and dairy cows'. *Reproduction in Domestic Animals*, 43 (Suppl. 5):20-28.

Prof Michael Duffy

Book Chapters

Duffy MJ (2009) 'Biomarkers in breast cancer: use in aiding diagnosis, determining prognosis and predicting response to therapy' In: Adit Ben-Baruch (eds). *Breast Cancer: From Pathogenesis to Potential Therapeutic Modalities*. Kerala, India: Transworld Research Network.

Peer Reviewed Journals

McGowan PM, Duffy MJ, McKiernan E, O'Donovan N, (2009) 'The role of ADAMs in disease pathophysiology'. *Clinica chimica acta; international journal of clinical chemistry*, 403 (1-2):31-36.

Gallagher WM, Lanigan F, McKiernan E, Brennan DJ, Hegarty S, Millikan RC, McBryan J, Jirstrom K, Landberg G, Martin F, Duffy MJ, (2009) 'Increased claudin-4 expression is associated with poor prognosis and high tumour grade in breast cancer'. *International Journal of Cancer*, 124 (9):2088-2097.

O'Donovan N, Browne BC, O'Brien N, Duffy MJ, Crown J, (2009) 'HER-2 signaling and inhibition in breast cancer'. *Current Cancer Drug Targets*, 9 (3):419-438.

McGowan PM, Duffy MJ, McKiernan E, O'Donovan N, (2009) 'Role of ADAMs in cancer formation and progression'. *Clinical Cancer Research*, 15 (4):1140-1144.

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Duffy MJ, Markey GC, Cullen R, Diggin P, Hill AD, Mc Dermott EW, O'Higgins NJ, (2009) 'Estrogen receptor-beta mRNA is associated with adverse outcome in patients with breast cancer'. *Tumour biology : the journal of the International Society for Oncodevelopmental Biology and Medicine*, 30 (4):171-175.

Martens JW, Span PN, Sieuwerts AM, Heuvel JJ, Spyrtos F, Duffy MJ, Eppenberger-Castori S, Vacher S, O'Brien K, McKiernan E, Pierce A, Vuaroqueaux V, Foekens JA, Sweep FC, (2009) 'Harmonisation of multi-centre real-time reverse-transcribed PCR results of a candidate prognostic marker in breast cancer: an EU-FP6 supported study of members of the EORTC - PathoBiology Group'. *EUROPEAN JOURNAL OF CANCER*, 45 (1):74-81.

Diamandis EP, Sturgeon CM, Duffy MJ, Stenman UH, Lilja H, BrA½nner N, Chan DW, Babaian R, Bast RC Jr, Dowell B, Esteva FJ, Haglund C, Harbeck N, Hayes DF, Holten-Andersen M, Klee GG, Lamerz R, Looijenga LH, Molina R, Nielsen HJ, Rittenhouse H, Semjonow A, Shih leM, Sibley P, SA¶IA©ormos G, Stephan C, Sokoll L, Hoffman BR, (2008) 'National Academy of Clinical Biochemistry laboratory medicine practice guidelines for use of tumor markers in testicular, prostate, colorectal, breast, and ovarian cancers'. *Clinical chemistry*, 54 (12):1-79.

Duffy MJ, McKiernan E, O'Brien K, Grebenchtchikov N, Geurts-Moespot A, Sieuwerts AM, Martens JW, Magdolen V, Evoy D, McDermott E, Crown J, Sweep FC, (2008) 'Protein kinase Cdelta expression in breast cancer as measured by real-time PCR, western blotting and ELISA'. *Cancer*, 99 (10):1644-1650.

Crown J, Duffy MJ, (2008) 'A personalized approach to cancer treatment: how biomarkers can help'. *Clinical chemistry*, 54 (11):1770-1779.

Professor Michael J. Dunn

Book Chapters

Donoghue P, Stastna M, Dunn MJ (2008) 'Protein separation by two-dimensional electrophoresis' In: Eyk JE, Dunn MJ (eds). *Clinical Proteomics: From Diagnosis to Therapy* . Weinheim: Wiley-VCH.

McManus C, Rose ML, Dunn MJ (2008) 'Diagnostic markers for monitoring heart transplant rejection' In: *Clinical Proteomics: From Diagnosis to Therapy* . Weinheim: Wiley-VCH.

Focking M, Pennington K, English J, Dunn MJ, Cotter D (2008) 'Proteomics provides insights into major psychiatric disorders' In: *Clinical Proteomics: From Diagnosis to Therapy* . Weinheim: Wiley-VCH.

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McManus, C. A., Donoghue, P. M., Dunn, M. J. (2009) 'A fluorescent codetection system for immunoblotting and proteomics through ECL-Plex and CyDye labeling'. *Methods Mol Biol*, 536 :515-26.

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Trott, D., McManus, C. A., Martin, J. L., Brennan, B., Dunn, M. J., Rose, M. L. (2009) 'Effect of phosphorylated hsp27 on proliferation of human endothelial and smooth muscle cells'. *Proteomics*, 9 (12):3383-94.

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Behan, A. T., Byrne, C., Dunn, M. J., Cagney, G., Cotter, D. R. (2009) 'Proteomic analysis of membrane microdomain-associated proteins in the dorsolateral prefrontal cortex in schizophrenia and bipolar disorder reveals alterations in LAMP, STXBP1 and BASP1 protein expression'. *Mol Psychiatry*, 14 (6):601-13.

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Rose, M. L., Dunn, M. J. (2009) 'Biomarkers of rejection: are we any closer to the Philosopher's Stone?'. *Transplantation*, 88 (4):453-4.

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Pennington, K., Focking, M., McManus, C. A., Pariante, C. M., Dunn, M. J., Cotter, D. R. (2009) 'A proteomic investigation of similarities between conventional and herbal antidepressant treatments'. *J Psychopharmacol*, 23 (5):520-30.

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English, J. A., Dicker, P., Focking, M., Dunn, M. J., Cotter, D. R. (2009) '2-D DIGE analysis implicates cytoskeletal abnormalities in psychiatric disease'. *Proteomics*, 9 (12):3368-82.

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Eisenacher, M., Martens, L., Hardt, T., Kohl, M., Barsnes, H., Helsens, K., Hakkinen, J., Levander, F., Aebbersold, R., Vandekerckhove, J., Dunn, M. J., Lisacek, F., Siepen, J. A., Hubbard, S. J., Binz, P. A., Bluggel, M., Thiele, H., Cottrell, J., Meyer, H. E., Apweiler, R., Stephan, C. (2009) 'Getting a grip on proteomics data - Proteomics Data Collection (ProDaC)'. *Proteomics*, 9 (15):3928-33.

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Bell AW et al. (2009) 'A HUPO test sample study reveals common problems in mass spectrometry-based proteomics'. *Nature Methods*, 6 :423-430.

Govender P, Dunn MJ, Donnelly SC (2009) 'Proteomics and the lung: Analysis of bronchoalveolar lavage fluid'. *Proteomics Clinical Applications*, 2 :1044-1051.

Radwan, M., Miller, I., Grunert, T., Marchetti-Deschmann, M., Vogl, C., O'Donoghue, N., Dunn, M. J., Kolbe, T., Allmaier, G., Gemeiner, M., Muller, M., Strobl, B. (2008) 'The impact of tyrosine kinase 2 (Tyk2) on the proteome of murine macrophages and their response to lipopolysaccharide (LPS)'. *Proteomics*, 8 (17):3469-85.
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&dopt=Citation&list_uids=18683816

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http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&dopt=Citation&list_uids=18712767

Pennington, K., Dicker, P., Dunn, M. J., Cotter, D. R. (2008) 'Proteomic analysis reveals protein changes within layer 2 of the insular cortex in schizophrenia'. *Proteomics*, 8 (23-24):5097-107.
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Dr Giuliano Elia

Peer Reviewed Journals

Keenan, J., Elia, G., Dunn, M.J., Orr, D.F., Pierscionek, B.K. (2009) 'Crystallin distribution patterns in concentric layers from toad eye lenses'. *Proteomics*, 9 .

Power, K. A., McRedmond, J. P., de Stefani, A., Gallagher, W. M., Gaora, P. O. (2009) 'High-throughput proteomics detection of novel splice isoforms in human platelets'. *PLoS ONE*, 4 (3).
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Dr Tadhg Ó'Cróinín

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