

Dr Andrew Hall
Selected publications

2013

Smith, I. D. M., J. P. Winstanley, K. M. Milto, C. J. Doherty, E. Czarniak, S. G. B. Amyes, A. Simpson and A. C. Hall (2013). "Rapid in situ chondrocyte death induced by *Staphylococcus aureus* toxins in a bovine cartilage explant model of septic arthritis." Osteoarthritis and Cartilage **21**(11): 1755-1765.

2011

Amin, A.K., Huntley, J.S., Patton, J.T., Brenkel, I.J., Simpson, A.H.W.R. & Hall, A.C. (2011). Hyperosmolarity protects chondrocytes from mechanical injury in human articular cartilage: An experimental report. *J. Bone Jt. Surg. (Br)*. 93(2), 277-284.

Huang CC, Lim PH, Hall AC, Huang CN (2011) A key role for KCl cotransport in cell volume regulation in human erythroleukemia cells. *Life Sciences* 88:1001-1008.

2010

Amin, A.K., Huntley, J.S., Simpson, A.H.R.W. & Hall, A.C. (2010). Increasing the osmolarity of joint irrigation solutions may avoid injury to cartilage: A pilot study. *Clin. Orthop. Related Res.* 468, 875-884.

Bush PG, Pritchard M, Loqman MY, Damron TA, Hall AC A Key Role for Membrane Transporter NKCC1 in Mediating Chondrocyte Volume Increase in the Mammalian Growth Plate. *Journal of Bone and Mineral Research* 25:1594-1603.

Murray, D.H., Bush, P.G., Brenkel, I.J. & Hall, A.C. (2010). Abnormal human chondrocyte morphology is related to increased levels of cell-associated IL-1 β and disruption to pericellular collagen type VI. *J. Orthop. Res.* In Press

Loqman MY, Bush PG, Farquharson C, Hall AC (2010) A Cell Shrinkage Artefact in Growth Plate Chondrocytes with Common Fixative Solutions: Importance of Fixative Osmolarity for Maintaining Morphology. *European Cells & Materials* 19:214-227.

2009

Amin, A.K., Huntley, J.S., Simpson, A.H.W. & Hall, A.C. (2009). Chondrocyte survival in articular cartilage: the influence of subchondral bone in a bovine model. *J. Bone Jt. Surg. (Br)*.91-B:691-699.

Amin, A.K., Huntley, J.S., Bush, P.G., Simpson, A.H.R.W. & Hall, A.C. (2009). Chondrocyte death in mechanically-injured articular cartilage – the influence of extracellular calcium. *J. Orthop. Res.*27(6), 778-784.

2008

Amin AK, Bush PG, Huntley JS, Simpson AHW, Hall AC (2008) Osmolarity influences chondrocyte death in wounded articular cartilage. *J Bone Jt Surg (Amer)* 90:1531-1542

Bush PG, Hall AC, Macnicol MF (2008) New insights into growth plate function: from clinical observations to chondrocyte enlargement and a possible role for membrane transporters. *J Bone Jt Surg (Br)* 90-B(12):1541-1547

Bush PG, Parisinos CA, Hall AC (2008) The osmotic sensitivity of in situ rat growth plate chondrocytes: clarifying the mechanism of hypertrophy. *J Cell Physiol* 214(3): 621-629

Kerrigan MJ, Hall AC (2008) Control of chondrocyte regulatory volume decrease (RVD) by $[Ca^{2+}]_i$ and cell shape. *Osteoarth & Cart* 16(3):312-322

2007

Bush PG, Wokosin DL, Hall AC (2007) Two-versus one photon excitation laser scanning microscopy: Critical importance of excitation wavelength. *Frontiers in Bioscience* 12: 2646-2657

Simpkin VL, Murray DH, Hall AP, Hall AC (2007) Bicarbonate-dependent pH_i regulation by chondrocytes within the superficial zone of bovine articular cartilage. *J Cell Physiol* 212(3): 600-609

Huang C-C, Hall AC, Lim P-H (2007) Characterisation of three pathways for osmolyte efflux in human erythro leukemia cells. *Life Sciences* 81(9): 732-739

2006

Kerrigan MJP, Hook CSV, Qusous A, Hall AC (2006) Regulatory volume increase (RVI) by in situ and isolated bovine articular chondrocytes. *Journal of Cellular Physiology* 209: 481-492

2005

Bush PG, Hodkinson PD, Hamilton GL, Hall AC (2005) Viability and volume of in situ bovine articular chondrocytes - changes following a single impact and effects of medium osmolarity. *Osteoarth & Cart* 13: 54-65

Bush PG, Hall AC (2005) Passive osmotic properties of in situ human articular chondrocytes within non-degenerate and degenerate cartilage. *J Cell Physiol* 204(1): 309-319

Huntley JS, Bush PG, McBirnie JM, Simpson AH, Hall AC (2005) Chondrocyte death associated with human femoral osteochondral harvest as performed for mosaicplasty. *J Bone Jt Surg Am* 87A(2): 351-360

Huntley JS, McBirnie JM, Simpson AH, Hall AC (2005) Cutting edge design to improve cell viability in osteochondral grafts. *Osteoarth & Cart* 13: 665-671

Huntley JS, Simpson AH, Hall AC (2005) Use of non-degenerate human osteochondral tissue and confocal laser scanning microscopy for the study of chondrocyte death at cartilage surgery. *Europ Cells Materials* 9: 13-22

Kerrigan MJP, Hall AC (2005) Stimulation of regulatory volume decrease (RVD) by isolated bovine articular chondrocytes following F-actin disruption using latrunculin B. *Biorheology* 42(4): 283-293

Some Significant Earlier Papers:

Bush, P.G. & Hall, A.C. (2003). The volume and morphology of chondrocytes within non-degenerate and degenerate human articular cartilage. *Osteoarth. Cart.* 11(4):242-251. [31]

Urban, J.P.G., Hall, A.C. & Gehl, K.A. (1993). Regulation of matrix synthesis rates by the ionic and osmotic environment of articular chondrocytes. *J. Cell. Physiol.* 154, 262-270. [139]

Hall, A.C., Urban, J.P.G. & Gehl, K.A. (1991). The effects of hydrostatic pressure on matrix synthesis in articular cartilage. *J. Orthop. Res.* 9, 1-10. [203]

Hall, A.C. & Ellory, J.C. (1986a). Evidence for the presence of volume-sensitive KCl transport in 'young' human red cells. *Biochim. Biophys. Acta* 858, 317-320. [126]