

Andrea Clark

PEER-REVIEWED PUBLICATIONS

- Clark AL:** (2008) Osteoarthritis: What we have been missing in the patellofemoral joint. *Exerc Sport Sci Rev.* 36:1:30-37.
- Clark AL, Leonard TR, Barclay LD, Matyas JR and Herzog W:** (2006) Heterogeneity in patellofemoral cartilage adaptation to anterior cruciate ligament transection; chondrocyte shape and deformation with compression. *Osteoarthritis and Cartilage* 14:2:120-130.
- Clark AL, Leonard TR, Barclay LD, Matyas JR and Herzog W:** (2005) Opposing cartilages in the patellofemoral joint adapt differently to long-term cruciate deficiency: chondrocyte deformation and reorientation with compression. *Osteoarthritis and Cartilage* 13:12:1100-1114.
- Clark AL, Mills L, Hart DA and Herzog W:** (2004) Muscle-induced patellofemoral joint loading rapidly affects cartilage mRNA levels in a site specific manner. *J Musculoskeletal Res* 8:1:1-12.
- Herzog W, Longino D, Clark A:** (2003) The role of muscles in joint adaptation and degeneration. *Langenbeck's Archives of Surgery* 288:5:305-315.
- Herzog W, Clark AL, Wu J:** (2003) Resultant and local loading in models of joint disease. *Arthritis and Rheumatism* 49:2:239-247.
- Clark AL, Barclay LD, Matyas JR and Herzog W:** (2003) In-situ chondrocyte deformation with physiological compression of the feline patellofemoral joint. *J Biomechanics* 36:553-568.
- Clark AL, Herzog W, Leonard TR.:** (2002) Contact area and pressure distribution in the feline patellofemoral joint under physiologically meaningful loading conditions. *J Biomechanics* 35:53-60.

BOOK CHAPTERS

- Clark AL:** (2009) Measurement techniques (pressure). In Encyclopedia of Neuroscience. Binder M, Hirokawa N and Windhorst U, Eds. Springer-Verlag, Berlin, Heidelberg. pp. 2265-2268. DOI 10.1007/978-3-540-29678-2_3350 <http://www.springerlink.com/content/g5320147754733r3>
- Herzog W, Clark A and Longino D:** (2004) Joint mechanics in Osteoarthritis. In Osteoarthritic Joint Pain. Chadwick D and Goode J Eds. Wiley, Chichester pp. 79-99.
- Clark AL:** (2004) Heterogeneous patellofemoral articular cartilage: mechanical and biological response to compression and anterior cruciate ligament transaction. Ph.D. Thesis supervised by Dr. Walter Herzog, University of Calgary, Calgary, AB, Canada.

PRESENTATIONS AT INTERNATIONAL AND NATIONAL SCIENTIFIC CONFERENCES

- Clark AL, Votta BJ, Kumar S, Liedtke W, Guilak F:** (2009) Osteoarthritic changes and increased bone density in *trpv4*^{-/-} mice are sex-dependent. *55th Annual Meeting of the Orthopedic Research Society*, 1118.
- Clark AL, Votta BJ, Kumar S, Liedtke W and Guilak F:** (2008) In situ chondrocyte calcium signaling in response to osmotic stress: The role of TRPV4 ion channel. *54th Annual Meeting of the Orthopedic Research Society*, 480.
- Clark AL, Liedtke W and Guilak F:** (2007) Osmotically-induced calcium signaling in murine articular chondrocytes: The role of TRPV4. *2007 Arthritis Research Conference*.
- Clark AL, Herzog W, Matyas J, Barclay L and Leonard T:** (2004) Heterogeneous adaptation of the patellofemoral joint to short- and long-term anterior cruciate ligament deficiency. [CD-ROM] *28th Annual Meeting of the American Society of Biomechanics*.
- Clark AL, Herzog W, Hart D, Mills L, Leonard T:** (2004) Muscle-induced patellofemoral joint loading affects cartilage mRNA levels. *50th Annual Meeting of the Orthopedic Research Society*, 619.
- Clark AL, Herzog W, Hart DA and Craig S:** (2003) Changes in cartilage mRNA levels with dynamic patellofemoral joint loading in-vivo. *49th Annual Meeting of the Orthopedic Research Society*, 638.
- Clark AL, Herzog W, Matyas JR, Barclay LD and Leonard TR:** (2003) Compression induced changes in chondrocyte shape and volume during the progression of osteoarthritis. *49th Annual Meeting of the Orthopedic Research Society*, 637.
- Clark AL, Herzog W, Matyas JR, Barclay LD and Leonard TR:** (2002) In-situ chondrocyte deformation in early stage Osteoarthritic (OA) articular cartilage. [CD-ROM] *IVth World Congress of Biomechanics*.

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- Clark AL**, Herzog W, Matyas JR and Leonard TR: (2002) Osteoarthritic morphological pathology >57 months post anterior cruciate ligament transection in the feline knee joint. *48th Annual Meeting of the Orthopedic Research Society*, 682.
- Clark AL**, Herzog W, Matyas JR, Barclay LD and Leonard TR: (2001) In-situ chondrocyte deformation in endstage osteoarthritic (OA) articular cartilage. *XVIIIth Congress of the International Society of Biomechanics*, 162.
- Clark AL**, Herzog W, Leonard TR: (2000 **Finalist, Young Investigator Award**) Contact area and pressure distribution in the feline patellofemoral joint under physiological loading conditions. *XIth Congress of the Canadian Society of Biomechanics*, 173.
- Clark AL**, Herzog W and Leonard T.: (2000) Gross morphology, contact area and pressure distribution in a long-term feline model of Osteoarthritis. *34th Annual Meeting of the Canadian Orthopedic Research Society*, 59.
- Clark AL**, Herzog W, Matyas JR and Barclay LD: (2000) In-situ chondrocyte deformation resulting from static compression of articular cartilage. *46th Annual Meeting of the Orthopedic Research Society*, 104.
- Clark AL**, Herzog W, Matyas JR and Barclay LD: (1999 **Finalist, Young Investigator Award**) Chondrocyte deformation resulting from in-situ static compression of articular cartilage. *XVIIth Congress of the International Society of Biomechanics*, 173.