

PAPERS ACCEPTED, IN PRESS, OR PUBLISHED 2009-2007:

1. Takahashi, M., Ward, S.R., Marchuk, L.L., **Frank, C.B.**, and Lieber, R.L.: Asynchronous muscle and tendon adaptation after static stretch using tendon transfer surgery: J Bone & Joint Surgery (JBJS-D-09-00694), Accepted, June 2009.
2. Zec, M.L., Thistlethwaite, P., **Frank, C.B.**, and Shrive, N.G.: Characterization of the fatigue behaviour of the medial collateral ligament utilizing traditional and novel mechanical variables for the assessment of damage accumulation. J. Biomech Eng, (ASME BIO-08-1169), In press, June 2009.
3. Tapper, J.E., Funakoshi, Y., Hariu, M., Marchuk, L., Thornton, G.M., Ronsky, J.L., Zernicke, R., Shrive, N.G., and **Frank, C.B.**: ACL/MCL transection affects knee ligament insertion distance of healing and intact ligaments during gait in the ovine model. J Biomech. 42(12):1825-1833, 2009.
4. **Frank, C.**, and Nason, E.: Health research: Measuring the social, health and economic benefits. Canadian Medical Association Journal 180(5):528-534, 2009.
5. Gooch, K., Smith, D., Wasylak, T., Faris, P., Marshall, D., Khong, H., Hibbert, J., Parker, R., Zernicke, R., Beaupre, L., Pearce, T., Johnston, B., and **Frank, C.**: The Alberta hip and knee replacement pilot project: A model for health technology assessment based on comparative effectiveness or clinical pathways. International Journal of Technology Assessment in Health Care 25(2):113-123, 2009.
6. Thornton, G.M., Shao, X., Kuchison, M.E., Marchuk, L.L., Shrive, N.G., and **Frank, C.B.**: Healing ligament mechanical properties are improved by interpositional allografting but not by treatment with hyaluronic acid. J. Orthop. Res. 27(3):400-407, 2009.
7. Butler, D.L., Lewis, J.L., **Frank, C.B.**, Banes, A.J., Caplan, A.I., DeDeyne, P.G., Dowling, M.A., Fleming, B.C., Glowacki, J., Guldberg, R.E., Johnstone, B., Kaplan, D.L., Levenston, M.E., Lotz, J.C., Lu, E.Y., Lumelsky, N., Mao, J.J., Mauck, R.L., McDevitt, C.A., Mejia, L.C., Murray, M., Ratcliffe, A., Spindler, K.P., Tashman, S., Wagner, C., Weisberg, E.M., Williams, C.S., and Zhang, R.: Evaluation criteria for musculoskeletal and craniofacial tissue engineering constructs: A conference report. Tissue Eng. Part A, 14(12):2089-2104, 2008.
8. Tapper, J.E., Fukushima, S., Azuma, H., Sutherland, C.A., Marchuk, L.L., Thornton, G.M., Ronsky, J.L., Zernicke, R.F., Shrive, N.G., and **Frank, C.B.**: Dynamic in vivo 3D kinematics of the ACL/MCL transected ovine stifle joint. J. Orthop. Res. 25(5): 660-672, 2008.
9. Darcy, S.P., Rosvold, J.M., Beveridge, J.E., Corr, D.T., Brown, J.J.Y., Sutherland, C.A., Marchuk, L.L., **Frank, C.B.**, and Shrive, N.G.: A comparison of passive flexion-extension to normal gait in the ovine stifle joint. J. Biomech. 41:854-850, 2008.
10. Howard, R.A., Rosvold, J.M., Tapper, J.E., Marchuk, L., Ronsky, J.L., **Frank, C.B.**, and Shrive, N.G.: Reproduction of in vivo motion using a parallel robot and calculation of resulting connective tissue loads. J. Biomech Eng. 129:743-749, 2007.
11. **Frank, C.B.**: The Institute of Musculoskeletal Health and Arthritis, Canadian Institutes of Health Research – Celebrating five years of progress in MSK, oral and skin research. J. Orthop. Nursing (Invited Paper) 11:66-68, 2007.
12. Marshall, D., Pericak, D., Grootendorst, P., Gooch, K., Faris, P., **Frank, C.**, Bellamy, N., Torrance, G., and Feeny, D.: Validation of a prediction model to estimate health utilities index mark 3 utility scores from WOMAC index scores in patients with osteoarthritis of the hip. Value in Health 11:470-7. 2008..
13. Wadey, V.M., Mohtadi, N.G., Bray, R.C., and **Frank, C.B.**: Positive predictive value of maximal posterior joint-line tenderness in diagnosing meniscal pathology: A pilot study. Can. J. Surgery 50(2):96-100, 2007.
14. Gooch, K., Culleton, B.F., Manns, B.J., Zhang, J., Alfonso, H., Tonelli, M., **Frank, C.**, Klarenbach, S., and Hemmelgarn, B.R.: NSAID use and progression of chronic kidney disease. Amer. Journal of

- Medicine 120:280.e1-280.e7, 2007.
15. Valderrabano, V., Nigg, B.M., von Tscharnner, V., **Frank, C.B.**, and Hintermann, B.: Total ankle replacement in ankle osteoarthritis: An analysis of muscle rehabilitation. *Foot Ankle Int.* 28(2):281-291, 2007. (J. Leonard Goldner Award 2006)
 16. Valderrabano, V., Nigg, B.M., Hintermann, B., Goepfert, B., Dick, W., **Frank, C.B.**, Herzog, W., and van Tscharnner, V.: Muscular lower leg asymmetry in middle-aged people. *Foot Ankle Int.* 28(2):242-249, 2007.
 17. Sun, J., Gooch, K., Svenson, L.W., Bell, N.R., and **Frank, C.**: Estimating osteoarthritis incidence from population-based administrative health care databases. *Annals of Epidemiology* 17:51-56, 2007.
 18. Funakoshi, Y., Hariu, M., Tapper, J.E., Marchuk, L.L., Shrive, N.G., Kanaya, F., Rattner, J.B., Hart, D.A., and **Frank, C.B.**: Periarticular ligament changes following ACL/MCL transaction in an ovine stifle joint model of osteoarthritis. *J. Orthop. Res.* 27(8):997-1006, 2007.

REFEREED CONFERENCE PAPERS 2009-2007:

1. Shrive, N.G., Gibbons-Kroeker, C., Tyberg, J.V., **Frank, C.B.**, Thornton, G.M., and Adeeb, S.M.: Modeling and Experiments to Understand Tissue Function. SEM Annual Conference and Exposition on Experimental and Applied Mechanics. Albuquerque, New Mexico, June 1-4, 2009. In press.

BOOKS, BOOK CHAPTERS, AND BOOKS EDITED 2009-2007:

1. **Frank, C.B.**: Ligaments. *In: Encyclopedic Reference of Neuroscience* (eds. Binder, M.D., Hirokawa, N., Windhorst, U.). Springer Verlag, Heidelberg, Germany, 2009, pp 2152-2155.
2. Boorman, R.S., Shrive, N.G., Marchuk, L.L., and **Frank, C.B.**: Ligament sprains and healing. *In: Biomechanics in Ergonomics*, 2nd Edition (ed. Kumar, S.), Taylor and Francis, London, UK, 2007, pp. 131-148.
3. Thornton, G.M., **Frank, C.B.**, and Shrive, N.G.: Ligament. *In: Biomechanics of the Musculo-Skeletal System*, 3rd Edition. (eds. Nigg, B.M. and Herzog, W.). John Wiley & Sons, West Sussex, UK, 2007, pp. 123-145.
4. **Frank, C.B.**, Shrive, N.G., Lo, I.K.Y., and Hart, D.A.: Form and function of tendon and ligament. *In: Orthopaedic Basic Science: Biology and Biomechanics of the Musculoskeletal System* (eds. Buckwalter, J.A., Einhorn, T.A., and Simon, S.R.). American Academy of Orthopaedic Surgeons, Rosemont, Illinois, U.S.A., 2007, pp. 191-222.
5. Hildebrand, K.A., Hart, D.A., Rattner, J.B., Marchuk, L.L., and **Frank, C.B.**: Chapter 2. Ligament injuries: Pathophysiology, healing and treatment considerations. *In: Musculoskeletal Rehabilitation*, 2nd Edition (eds. Magee, D.J., Zachazewski, J.E., Quillen, W.S.). Elsevier, Inc., Philadelphia, PA, U.S.A., 2007, pp. 23-46.