

## Select Publications from MIOB Lab Members

- Atkins PR, Fiorentino NM, Aoki SK, Peters CL, Maak TG, Anderson AE. In Vivo Measurements of the Ischiofemoral Space in Recreationally Active Participants During Dynamic Activities: A High-Speed Dual Fluoroscopy Study. *Am J Sports Med.* 2017 Jul; [Epub ahead of print]. doi: 10.1177/0363546517712990.
- Fiorentino NM, Atkins PR, Kutschke MJ, Goebel J, Foreman KB, Anderson AE. Soft Tissue Artifact Causes Significant Errors in the Calculation of Joint Angles and Range of Motion at the Hip. *Gait Posture.* 2017 Jun;55:184-190. doi: 10.1016/j.gaitpost.2017.03.033.
- Nichols JA, Roach KE, Fiorentino NM, Anderson AE. Subject-Specific Axes of Rotation Based on Talar Morphology Do Not Improve Predictions of Tibiotalar and Subtalar Joint Kinematics. 2017 Jun; 21:1-13 *Ann Biomed Eng.* doi: 10.1007/s10439-017-1874-9.
- Fiorentino NM, Atkins PR, Kutschke MJ, Foreman KB, Anderson AE. In-vivo Quantification of Dynamic Hip Joint Center Errors and Soft Tissue Artifact. *Gait Posture.* 2016 Sep 11;50:246-11. doi: 10.1016/j.gaitpost.2016.09.011. PMID: 27693944.
- Roach KE, Wang B, Kapron AL, Fiorentino NM, Saltzman CL, Foreman KB, Anderson AE. In-vivo Kinematics of the Tibiotalar and Subtalar Joints in Asymptomatic Subjects: A High-speed Dual Fluoroscopy Study. *J Biomech Eng.* 2016 Sep 1;138(9). doi: 10.1115/1.4034263. PMID: 27455417.
- Handsfield GG, Knaus KR, Fiorentino NM, Meyer CH, Hart JM, Blemker SS. Adding Muscle Where You Need It: Non-uniform Hypertrophy Patterns in Elite Sprinters. *Scand J Med Sci Sports.* 2016 Jul 4. doi: 10.1111/sms.12723.
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- Fiorentino NM, Lin JS, Ridder KB, Guttman MA, McVeigh ER, Blemker SS. Rectus femoris muscle moment arms measured in vivo during dynamic motion with real-time MRI. *J Biomech Eng.* 2013 Apr;135(4):044501. doi: 10.1115/1.4023523. PMID: 24231903.
- Fiorentino NM, Rehorn MR, Chumanov ES, Thelen DG, Blemker SS. Computational models predict larger muscle tissue strains at faster sprinting speeds. *Med Sci Sports Exerc.* 2014 Apr;46(4):776-86. doi: 10.1249/MSS.0000000000000172. PMID: 24145724.
- Fiorentino NM, Epstein FH, Blemker SS. Activation and aponeurosis morphology affect in vivo muscle tissue strains near the myotendinous junction. *J Biomech.* 2012 Feb 23;45(4):647-52. doi: 10.1016/j.jbiomech.2011.12.015. Epub 2012 Jan 10. PMID: 22236527.
- Blair-Levy JM, Watts CE, Fiorentino NM, Dimitriadis EK, Marini JC, and Lipsky PE. A type I collagen defect leads to rapidly progressive osteoarthritis. *Arthritis Rheum.* 2008 Apr;58(4):1096-106. doi: 10.1002/art.23277.