



Publications

1. Determan, J, S Swanson, W. McDermott, and J. Hamill. Ground reaction forces in treadmill vs. overground running. Canadian Society of Biomechanics, Halifax, Nova Scotia, Canada. August 4-7, 2004. (*conference proceeding*)
2. Swanson, SC and GE Caldwell. Kinetic limitations of maximal sprinting speed: revisited. International Society of Biomechanics, Cleveland, OH, August 1-4, 2005. (*conference proceeding*)
3. Seay, J., Swanson, S., & Hamill, J. (2007). LUMBO-SACRAL KINEMATICS AND FORCES IN RUNNERS WITH AND WITHOUT LOW BACK PAIN. *Journal of Biomechanics*, 40, S255.
4. Hamill, J., Moses, M., & Seay, J. (2009). Lower extremity joint stiffness in runners with low back pain. *Research in Sports Medicine*, 17(4), 260-273.
5. Crowell, Harrison Philip. *Gait retraining for the reduction of lower extremity loading*. University of Delaware, 2009. Dissertation.
6. Paulos, L., Swanson, S. C., Stoddard, G. J., & Barber-Westin, S. (2009). Surgical Correction of Limb Malalignment for Instability of the Patella A Comparison of 2 Techniques. *The American journal of sports medicine*, 37(7), 1288-1300.
7. Popp, K. L. (2009). Bone mass, estimated strength and Kinetic changes in collegiate and post-collegiate runners with a history of stress fracture. University of Minnesota. Dissertation.
8. Miller, R. H., Chang, R., Baird, J. L., Van Emmerik, R. E., & Hamill, J. (2010). Variability in kinematic coupling assessed by vector coding and continuous relative phase. *Journal of biomechanics*, 43(13), 2554-2560.
9. Crowell, H. P., Milner, C. E., Hamill, J., & Davis, I. S. (2010). Reducing impact loading during running with the use of real-time visual feedback. *journal of orthopaedic & sports physical therapy*, 40(4), 206-213.

10. Miller, R. H., Chang, R., Baird, J. L., Van Emmerik, R. E., & Hamill, J. (2010). Variability in kinematic coupling assessed by vector coding and continuous relative phase. *Journal of biomechanics*, 43(13), 2554-2560.
11. Grabowski, A. M., McGowan, C. P., McDermott, W. J., Beale, M. T., Kram, R., & Herr, H. M. (2010). Running-specific prostheses limit ground-force during sprinting. *Biology letters*, 6(2), 201-204.
12. Seay, J. F., Van Emmerik, R. E., & Hamill, J. (2011). Low back pain status affects pelvis-trunk coordination and variability during walking and running. *Clinical Biomechanics*, 26(6), 572-578.
13. John, D., Miller, R., Kozey-Keadle, S., Caldwell, G., & Freedson, P. (2012). Biomechanical examination of the 'plateau phenomenon' in ActiGraph vertical activity counts. *Physiological measurement*, 33(2), 219.
14. McGowan, C. P., Grabowski, A. M., McDermott, W. J., Herr, H. M., & Kram, R. (2012). Leg stiffness of sprinters using running-specific prostheses. *Journal of The Royal Society Interface*, 9(73), 1975-1982.
15. Look, N., Arellano, C. J., Grabowski, A. M., McDermott, W. J., Kram, R., & Bradley, E. (2013). Nonlinear dynamics of running: Speed, stability, symmetry and the effects of leg amputations. *arXiv preprint arXiv:1305.6821*.
16. Look, N., Arellano, C. J., Grabowski, A. M., McDermott, W. J., Kram, R., & Bradley, E. (2013). Dynamic stability of running: The effects of speed and leg amputations on the maximal Lyapunov exponent. *Chaos: An Interdisciplinary Journal of Nonlinear Science*, 23(4), 043131.
17. McGowan, C., Grabowski, A., McDermott, W., Kram, R., & Herr, H. THE EFFECTS OF SPRINT SPEED ON APPARENT STIFFNESS IN UNI-LATERAL TRANS-TIBIAL AMPUTEE SPRINT RUNNERS.
18. Fischer, K. M., Willwacher, S., Küsel-Feldker, M., & Brüggemann, G. P. (2013). A Novel Approach to Study Locomotion in Under-g Load Bearing Conditions. *Procedia Engineering*, 60, 112-117.