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Education

B.S. Trinity College, Engineering (Biomedical and Mechanical Concentrations), 1998

M.S. Marquette University, Biomedical Engineering, 2001

Ph.D. Texas Woman's University, Kinesiology: Biomechanics, expected Spring 2012

Research Interests

- Biomechanical and Functional Evaluation in Pediatric Patients with Hip Pathology
- Multi-segmental Foot Kinematics: The Relationship Between Foot Structure, Motion and Plantar Pressures
- Real-world function using portable activity monitors
- Outcomes Assessment of Treatment for Clubfoot
- Gait, Strength and Energy Efficiency in Individuals with Limb Deficiency
- Dynamic Spinal Mobility in Adolescents with Idiopathic Scoliosis
- Evaluation of Human Performance in Healthy Children and Adults

Selected Peer-reviewed Publications

Tulchin, K., Campbell, S., Browne, R., & Orendurff, M. (2009). Effect of Sample Size and Reduced Number of Principle Components on the Gillette Gait Index. *Gait Posture*, 29 (4), 526-529. PMID: 19233654

Tulchin, K., Orendurff, M., Adolfsen, S., & Karol L. (2009) Effect of Walking Speed on Multi-Segment Foot Kinematics in Adults. *J Appl Biomech*, 25 (4), 377-386. PMID: 20095459

Tulchin, K., Orendurff, M., & Karol, L. (2010) Comparison of Multi-Segment Foot Kinematics During Overground and Treadmill Walking. *Gait Posture*, 31 (1), 104-108. PMID: 19854652

Tulchin, K., & Cummings, D. (2010) Multi-Dimensional Motion of the TALUX Foot System in a Bilateral Below-Knee Amputee." *J Prosth Orthotics*, 22 (1), 53-55.

Oetgen M.E., Walick, K.S., **Tulchin, K.**, Karol, L., & Johnston, C.E. (2010) Functional Results after Surgical Treatment for Congenital Knee Dislocation. *J Pediatr Orthop*, 30 (3), 216-223. PMID: 20357585

Sucato, D., **Tulchin, K.**, Shrader, W., Hernandez, A., Gist, T., & Sheu, G. (2010) Gait, Hip Strength and Functional Outcomes Following a Ganz Periacetabular Osteotomy for Adolescent Hip Dysplasia. *J Pediatr Orthop*, 30 (4), 344-350. PMID: 20502234

Orendurff, M.S., Walker, J.D., Jovanovic, M., **Tulchin, K.**, Levy, M., & Hoffman, D. (In Press, Epub 2010) Intensity and duration of intermittent exercise and recovery during a soccer match. *J Strength Cond Res*. PMID: 20145552

Tulchin, K., Orendurff, M., & Karol, L. (In Press, 2010) Effects of Surface Slope on Multi-Segment Foot Kinematics in Healthy Adults. *Gait Posture*.

Honors and Activities

- 2008 Best Poster Award, GCMAS, "Proceed with Caution: Large Number of Controls Are Needed for An Accurate Gillette Gait Index"
- 2009 Best Clinical Paper Award, Annual Meeting of Pediatric Orthopedic Society of North America, "Limb Salvage vs. Symes Amputation for Fibular Hemimelia"
- 2009 – present Program Organizer, DFW Movement Science Symposium
- 2009 – present Member, Research Advisory Panel, TSRHC
- 2010 – present Chair, Awards Committee, Gait and Clinical Movement Analysis Society (GCMAS)