

Christopher Lawrence MacLean, Ph.D.

CURRICULUM VITAE

RELEVANT EXPERIENCE:

- Ph.D. program in Biomechanics at the University of Massachusetts Amherst
- 16 years of clinical and administrative experience in the custom foot orthotic industry
- 14 years of academic experience in Exercise Science
- 10 years of research experience investigating the mechanism and management of lower extremity injuries

ACADEMIC QUALIFICATIONS:

- 2000 - 2006 - University of Massachusetts Ph.D. Biomechanics
- 1995 - 1996 - Dalhousie University - Pre-Medicine/podiatric studies
- 1990 - 1995 - University of British Columbia - M.Sc. Human Kinetics
- 1986 - 1990 - Acadia University - B.Sc. Exercise Science

PROFESSIONAL WORK EXPERIENCE:

- 2005 - Present - Biomechanist, Forensic Dynamics Inc.
- 2005 - Present - Director of Biomechanics, Paris Orthotics Lab Division
- 2004 - 2005 - Consultant/Private Contractor, Timberland Inc.
- 2000 - 2005 - Research Assistant, Biomechanics Laboratory, University of Mass.
- 2001 - 2002 - Teaching Assistant, Undergraduate Biomechanics
- 1996 - 2004 - National Lab Service Technical Marketing, Paris Orthotics Lab Division
- 1995 - 1996 - Pedorthist, Orthotics East, Ltd.
- 1991 - 1995 - Pedorthist, Paris Orthotics Pedorthic Services

PROFESSIONAL ASSOCIATIONS:

- President, Prescription Foot Orthotic Laboratory Association
- Member, International Society of Biomechanics
- Member, Canadian Society of Biomechanics
- Chairperson, Paris Orthotics Lab Division

PUBLICATIONS:

Journals

- MacLean, C.L., Taunton, J.E., Clement, D.B., Regan, W.D., Stanish, W.E. Eccentric kinetic chain exercise as a conservative means of functionally rehabilitation chronic isolated insufficiency of the posterior cruciate ligament. Clinical Journal of Sports Medicine, 1999; 9:142-150.
- MacLean, C.L., Taunton, J.E., Clement, D.B., Regan, W.D. Eccentric and concentric isokinetic moment characteristics of the chronic isolated posterior cruciate ligament injured knee. British Journal of Sports Medicine, 1999; 33:405-408.
- MacLean, C.L., Davis, I.M., Hamill, J. Influence of Custom Foot Orthotic Intervention on Lower Extremity Dynamics in Healthy Female Runners. Clinical Biomechanics, 2006; 21:623-630.
- Ryan, M., MacLean, C.L., Taunton, J.E. Epidemiology, Joint Coupling and Risk Factors Associated with Running Injuries: A Review. International Sports Medicine Journal, 2006; 7(2).
- MacLean, C.L., David, I.M., Hamill, J. Short- and Long-term Influences of a Custom Foot Orthotic Intervention on Lower Extremity Dynamics. Clinical Journal of Sports Medicine, (in review).
- MacLean, C.L., Davis, I.M., Hamill, J. Does Running Shoe Midsole Composition With and Without Custom Foot Orthotic Intervention Influence Lower Extremity Dynamics? Journal of Applied Biomechanics, (in review).
- MacLean, C.L., van Emmerik, R., Hamill, J. The Influence of a Custom Foot Orthotic Intervention on Lower Extremity Intra-limb Coupling During a 30-minute Run. Journal of Biomechanics, (in preparation).

Conference Proceedings

- Taunton, J.E., Rollins, M., Beers, A., Ryan, M., MacLean, C.L. A Prospective Study of Running Injuries in Women Participating in 16-week Half-marathon Clinics. Clinical Journal of Sports Medicine, 16(2): 185.
- MacLean, C.L., Hamill, J. Short- and Long-term Influence of a Custom Foot Orthotic Intervention on the Lower Extremity Dynamics in Injured Runners. Proceedings of the International Society of Biomechanics. Cleveland, Ohio, 2005.
- MacLean, C.L., van Emmerik, R., Hamill, J. Influence of a Custom Orthotic Intervention on Intra-limb Coordination Variability During Running. Proceedings of the Canadian Society of Biomechanics. Halifax, Nova Scotia, 2004.

Conference Proceedings (Continued)

- MacLean, C.L., Hamill, J. Influence of a Custom Foot Orthotic Intervention on Lower Extremity Kinematics and Kinetics During Running. Proceedings of the International Society of Biomechanics. Dunedin, New Zealand, 2003.
- O'Connor, K.M., MacLean, C.L., Hamill, J. Does The Heel Counter Control Movement of the Rear Foot? Medicine and Science in Sports and Exercise, 34(5) Supplement 1:S5.
- MacLean, C.L., Taunton, J.E. Eccentric Kinetic Chain Exercise as a Conservative Means of Functionally Rehabilitating Chronic Isolated Insufficiency of the Posterior Cruciate Ligament. Proceedings of the Canadian Academy of Sports Medicine. Halifax, Nova Scotia, 1997.
- MacLean, C.L., Taunton, J.E. Eccentric and Concentric Isokinetic Moment Characteristics of the Chronic Isolated Posterior Cruciate Ligament Injured Knee. Proceedings of the Canadian Academy of Sports Medicine. Ottawa, Ontario, 1993.