

CURRICULUM VITAE

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NATIONALITY: Canadian

DATE OF BIRTH: November 29, 1968

EDUCATION

- 1996 Doctor of Philosophy (Ph.D.) in Mechanical Engineering
University of Calgary, Calgary, Canada
Specialization: Biomechanics Supervisor: Dr. Benno M. Nigg
- 1990 Bachelor of Science (B.E.) in Mechanical Engineering - Great Distinction
University of Saskatchewan, Saskatoon, Canada

PROFESSIONAL MEMBERSHIPS

International Society of Biomechanics
Canadian Society for Biomechanics
International Society of Biomechanics Technical Group on Functional Footwear
International Society of Biomechanics in Sports
Association of Professional Engineers, Geologists and Geophysicists of Alberta

PROFESSIONAL EXPERIENCE

- 2004- **Associate Professor**
Faculty of Kinesiology, University of Calgary, Canada
- 2004- **Adjunct Associate Professor**
Department of Mechanical and Manufacturing Engineering, University of Calgary, Canada
- 2001-2004 **Adjunct Assistant Professor**
Department of Mechanical and Manufacturing Engineering, University of Calgary, Canada
- 1997-2004 **Assistant Professor**
Faculty of Kinesiology, University of Calgary, Canada
- 1996-1997 **Research Associate**
Human Performance Laboratory, The University of Calgary, Calgary, Canada
- 1992-1996 **Teaching Assistant - Graduate Student**
The University of Calgary, Calgary, Canada
- 1990-1992 **Production Engineer**
Shell Canada Limited, Calgary, Canada
- 1990 **Research Assistant**
Koninklijke Shell Laboratorium, Amsterdam, Netherlands

SERVICE EXPERIENCE

- 2009- **Associate Editor**
Footwear Science
- 2009- **Executive Board Member**
International Society of Biomechanics
- 2009 **Chair**
Ninth Symposium on Footwear Biomechanics, Stellenbosch, South Africa
- 2008- **Editorial Board**
Sports Technology
- 2007-2009 **Chairperson**
International Society of Biomechanics Technical Group on Functional Footwear
- 2005-2007 **Chairperson Elect**
International Society of Biomechanics Technical Group on Functional Footwear
- 2001-2005 **Executive Board Member**

	International Society of Biomechanics Technical Group on Functional Footwear
2000-2006	Secretariat of Member Affairs Canadian Society for Biomechanics
2002	Secretary General Fourth World Congress of Biomechanics, Calgary, Canada, 2002
1999	Chair Fourth Symposium on Footwear Biomechanics, Canmore, Canada
1999	Secretary General International Society of Biomechanics XVII Conference, Calgary, Canada

REFEREED PUBLICATIONS

1. Osis, S., Worobets, J.T and **Stefanyshyn, D.J.** (in preparation) Slips and falls – the importance of shear forces. *Journal of Biomechanics*.
2. Wannop, J.W. and **Stefanyshyn, D.J.** (in preparation) Footwear traction and joint loading during a cutting movement. *American Journal of Sport Medicine*.
3. Carpes, F.P., Diefenthaler, F., Bini, R.R., **Stefanyshyn, D.**, Faria, I.E. and Mota, C.B. (submitted) Does leg preference affect muscle activation and efficiency? *Human Movement Science*.
4. Carpes, F.P., Diefenthaler, F., Bini, R.R., **Stefanyshyn, D.**, Faria, I.E. and Mota, C.B. (submitted) Influence of cycling experience and leg preference on bilateral EMG and efficiency during cycling. *European Journal of Applied Physiology*.
5. Wannop, J.W., Worobets, J.T. and **Stefanyshyn, D.J.** (submitted) Normalization of ground reaction forces and joint moments in human locomotion. *Gait & Posture*.
6. Carpes, F.P., Dagnese, F., Mota, C.B. and **Stefanyshyn, D.J.** (accepted) Cycling with Rotor Cranks[®] changes the 3-D kinematics of the lower limbs. *Sports Biomechanics*
7. Poirier, L., Maw, S., **Stefanyshyn, D.** and Thompson, R.I. (accepted) Optimization of hand held guage sizes for rocker measurements of skate blades and bobsleigh runners. *Sports Engineering*.
8. Luo, G., Stergiou, P., Worobets, J., Nigg, B.M. and **Stefanyshyn, D.J.** (in press) Improved footwear comfort reduces oxygen consumption when running. *Footwear Science*.
9. Park, S.K., **Stefanyshyn, D.J.**, Loitz-Ramage, B., Hart, D.A., Ronsky, J.R. (2009) Alterations in knee joint laxity during the menstrual cycle in healthy females leads to increases in joint loads during selected athletic movements. *American Journal of Sports Medicine*, Vol 37(6), 1169-1177
10. Park, S.K., **Stefanyshyn, D.J.**, Loitz-Ramage, B., Hart, D.A., Ronsky, J.R. (2009) Relationship between knee joint laxity and knee joint mechanics during the menstrual cycle. *British Journal of Sports Medicine*, Vol. 43, 174-179.
11. Nigg, B.M., **Stefanyshyn, D.J.** and Rozitis, A. (2009) Resultant knee joint moments for lateral movement tasks on sliding and non-sliding sport surfaces. *Journal of Sport Sciences*, Vol. 27(5), 427-435.
12. Park, S.K., **Stefanyshyn, D.J.**, Loitz-Ramage, B., Hart, D.A., Ronsky, J.R. (2009) Changing hormone levels during the Menstrual Cycle affect Knee Laxity and Stiffness in Healthy Females. *American Journal of Sports Medicine*, Vol. 37(3), 588-598.

13. Edgecombe, T.L. and **Stefanyshyn, D.J.** (2008) Investigating the Location of Manufacturers' Binding Positions of Alpine Skis with Similar Shape and Flexural Rigidity. *Sports Technology*, Vol. 1(2-3), 105-109.
14. Valderrabano, V., Nigg, B.M., von Tscharnar, V., **Stefanyshyn, D.J.**, Goepfert, B. and Hintermann, B. (2007) Gait analysis in ankle osteoarthritis and total ankle replacement. *Clinical Biomechanics*, Vol. 22(8), 894-904.
15. Worobets, J.T., Fairbairn, J.C. and **Stefanyshyn, D.J.** (2006) The influence of shaft stiffness on potential energy and puck speed during wrist and slap shots in ice hockey. *Sports Engineering*, Vol. 9, 191-200.
16. **Stefanyshyn, D.J.** and Hettinga, B. A. (2006) Running injuries and orthotics. *International SportMed Journal*, online.
17. **Stefanyshyn, D.J.**, Stergiou, P., Lun, V.M.Y., Meeuwisse, W. and Worobets, J.T. (2006) Knee angular impulse as a predictor of patellofemoral pain in runners. *American Journal of Sports Medicine*, Vol. 34(11), 1844-1851.
18. Roy, J.P. and **Stefanyshyn, D.J.** (2006) Influence of shoe midsole bending stiffness on running economy, joint energy and EMG. *Medicine and Science in Sports and Exercise*, Vol. 38(3), 562-569.
19. Mündermann, A., Wakeling, J.M., Nigg, B.M., Humble, R.N. and **Stefanyshyn, D.J.** (2006) Foot orthoses affect frequency components of muscle activity in the lower extremity. *Gait and Posture*, Vol. 23(3), 295-302.
20. Kim, S.J. and **Stefanyshyn, D.J.** (2006) Foot arch strain of athletes and non-athletes during weight bearing, walking and running. *Korean Journal of Physical Education*, Vol. 45(1), 757-767.
21. Krell, J.B. and **Stefanyshyn, D.J.** (2006) The relationship between extension of the metatarsophalangeal joint and sprint time for 100m Olympic athletes. *Journal of Sports Sciences*, Vol. 24(2), 175-180.
22. Kim, S.J., **Stefanyshyn, D.J.** and Kim, R.B. (2005) Effects of foot orthotics on the foot arch strain related to plantar fasciitis during treadmill level and uphill walking and running. *Korean Journal of Sport Biomechanics*, Vol. 15(1), 155-176.
23. Van Horne, S. and **Stefanyshyn, D.J.** (2005) Potential method of optimizing the klapskate hinge position in speed skating. *Journal of Applied Biomechanics*, Vol. 21(3), 211-222.
24. Tack, G.R., Han, Y.M., Choi, S., Yi, J.H., Lim, Y.T., Park, S.K., **Stefanyshyn, D.** and Park, S.H. (2005) Relationship between walking speed and smoothness of movement. *Korean Journal of Sport Biomechanics*, Vol. 15(2), 1-10.
25. Nurse, M.A., Hulliger, M., Wakeling, J.M., Nigg, B.M. and **Stefanyshyn, D.J.** (2005) Changing the texture of footwear can alter gait patterns. *Journal of Electromyography and Kinesiology*, Vol. 15(5), 496-506.
26. Lun, V.M.Y., Meeuwisse, W.H., Stergiou, P. and **Stefanyshyn, D.J.** (2004) Relation between running injury and static lower limb alignment in recreational runners. *British Journal of Sports Medicine*, Vol. 38, 576-580.
27. Mündermann, A., Nigg, B.M., Humble, R.N. and **Stefanyshyn, D.J.** (2004) Consistent immediate effects of foot orthoses on comfort and lower extremity kinematics, kinetics and muscle activity. *Journal of Applied Biomechanics*, Vol. 20(1), 71-84.
28. **Stefanyshyn, D.J.** and Fusco, C. (2004) Increased shoe bending stiffness increases sprint performance. *Sports Biomechanics*, Vol. 3(1), 55-66.
29. Valderrabano, V., Hintermann, B., Nigg, B., **Stefanyshyn, D.** and Stergiou, P. (2003) Kinematic Changes after Fusion and Total Replacement of the Ankle – Part 1: Range of Motion. *Foot and Ankle International*, Vol. 24(12), 881-887.

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31. Valderrabano, V., Hintermann, B., Nigg, B., **Stefanyshyn, D.** and Stergiou, P. (2003) Kinematic Changes after Fusion and Total Replacement of the Ankle – Part 3: Talar Movement. *Foot and Ankle International*. Vol. 24(12), 897-900.
32. Mündermann, A., Nigg, B.M., Humble, R.N. and **Stefanyshyn, D.J.** (2003) Orthotic comfort is related to kinematics, kinetics and EMG in recreational runners. *Medicine and Science in Sports and Exercise*, Vol. 35, 10, 1710-1719.
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34. Nigg, B.M., Stergiou, P., Cole, G., **Stefanyshyn, D.J.**, Mündermann, A., and Humble, R.N. (2003) Effect of shoe inserts on kinematics, center of pressure and leg joint moments during running. *Medicine and Science in Sports and Exercise*, Vol. 35(2), 314-319.
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36. Schollhorn, W.I., Nigg, B.M., **Stefanyshyn, D.J.** and Liu, W. (2002) Identification of individual walking patterns using time discrete and time continuous data sets. *Gait and Posture*, Vol. 15, 180-186.
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39. **Stefanyshyn, D.J.** and Nigg, B.M. (2000) Energy aspects associated with sport shoes. *Sportverletzung-Sportschaden*, Vol. 14, 82-89.
40. Miller, J.E., Nigg, B.M., Liu, W., **Stefanyshyn, D.J.** and Nurse, M. A. (2000) Influence of foot, leg and shoe characteristics on subjective comfort. *Foot and Ankle International*, Vol. 21(9), 759-767.
41. **Stefanyshyn, D.**, Nigg, B., Fisher, V., O'Flynn, B. and Liu, W. (2000) The influence of high heeled shoes on the kinematics, kinetics and muscle emg of normal female gait. *Journal of Applied Biomechanics*, Vol. 16(3), 309-319.
42. Nigg, B.M., Nurse, M.A., **Stefanyshyn, D.J.** (2000) Sporteinlagen – ein neues Konzept. (Sport inserts – a new concept). *Orthopädie Schuhtechnik, OST Sonderheft Propriozeption*, 32-40.
43. **Stefanyshyn, D.J.** and Nigg, B.M. (2000) Influence of midsole bending stiffness on joint energy and jump height performance. *Medicine and Science in Sports and Exercise*, Vol. 32(2), 471-476.
44. Baroud, G., Nigg, B.M. and **Stefanyshyn, D.J.** (1999) Energy storage and return in sport surfaces. *Sports Engineering*, Vol. 2, 173-180.
45. Sasse, M., Nigg, B.M. and **Stefanyshyn, D.J.** (1999) Tibiotalar motion - Effect of fibular displacement and Deltoid Ligament transection: In vitro study. *Foot and Ankle International*, Vol. 20 (11), 733-737.

46. Nigg, B.M., Nurse, M. A. and **Stefanyshyn, D.J.** (1999) Shoe Inserts and orthotics for sport and physical activities. *Medicine and Science in Sports and Exercise*, Vol. 31, 7Suppl., S421-S428.
47. Liu, W., Miller, J., **Stefanyshyn, D.J.** and Nigg, B.M. (1999) Accuracy and reliability of a technique for quantifying foot shape, dimensions and structural characteristics. *Ergonomics*, Vol. 42(2), 346-358.
48. Lee, S., Muller, C.Ch., **Stefanyshyn, D.J.** and Nigg, B.M. (1999) Relative forefoot abduction and its relationship to foot length *in vitro*. *Clinical Biomechanics*, Vol. 14(3), 193-202.
49. **Stefanyshyn, D.J.** and Nigg, B.M. (1998) Dynamic angular stiffness of the ankle joint during running and sprinting. *Journal of Applied Biomechanics*, Vol. 14(3), 292-299.
50. Nigg, B.M., Khan, A., Fisher, V. and **Stefanyshyn, D.** (1998) Effect of shoe insert construction on foot and leg movement. *Medicine and Science in Sports and Exercise*, Vol. 30, 550-555.
51. **Stefanyshyn, D.J.** and Nigg, B.M. (1998) Contribution of the lower extremity joints to mechanical energy in running vertical jumps and running long jumps. *Journal of Sports Sciences*, Vol. 16, 177-186.
52. **Stefanyshyn, D.J.** and Nigg, B.M. (1997) Mechanical energy contribution of the metatarsophalangeal joint to running and sprinting. *Journal of Biomechanics*, Vol. 30 (11/12), 1081-1085.
53. Stähelin, T., Nigg, B.M., **Stefanyshyn, D.J.**, van den Bogert, A.J. and Kim, S.J. (1997) A method to determine bone movement in the ankle joint complex *in vitro*. *Journal of Biomechanics*, Vol. 30 (5), 517-519.
54. **Stefanyshyn, D.J.** and Engsberg, J.R. (1994) Right to left differences in the ankle joint complex range of motion. *Medicine and Science in Sports and Exercise*, Vol. 26 (5), 551-555.
55. **Stefanyshyn, D.J.**, Engsberg, J.R., Harder, J.A., and Tedford, K.G. (1994) A pilot study to test the influence of specific prosthetic features in preventing below-knee amputees from walking like able-bodies. *Prosthetics and Orthotics International*, Vol. 18, 180 -190.

NON-REFEREED PUBLICATIONS (Including Book Chapters and Editorships)

1. **Stefanyshyn, D.J.** and Edgecombe, T.L. (in press) Ice skating – speed skating, ice hockey, figure skating. *Handbuch der Sportbiomechanik* Editors A. Gollhoffer and E. Mueller, Springer-Verlag.
2. **Stefanyshyn, D.J.** and Worobets, J.T. (2008) Sports equipment – energy and performance. In *Handbook of Biomechanics and Human Movement Science*, Editors Y. Hong and R. Bartlett, Routledge International Handbooks, pp. 257-268.
3. Worobets, J.T. and **Stefanyshyn, D.J.** (2008) Shaft stiffness: Implications for club fitting. In *Science and Golf V*, Editors D. Crews and R. Lutz, Energy in Motion, pp. 431-437.
4. Anderson, B.C., Wright, I.C. and **Stefanyshyn, D.J.** (2006) Segmental sequencing of kinetic energy in the golf swing. In *The Engineering of Sport 6*, Editors E. Moritz and S. Haake, Springer Verlag, pp. 167-172.
5. **Stefanyshyn, D.J.** (2006) Player surface interaction – injury and performance. *Pitchcare*, Vol. 8, 14-16.
6. **Stefanyshyn, D.J.** and Nigg, B.M. (2003) Energy and performance aspects in sports surfaces. In *Sport Surfaces – Biomechanics, Injuries, Performance, Testing and Installation*, Editors. B.M. Nigg, G.K. Cole and D.J. Stefanyshyn, University of Calgary, Calgary, Canada. pp 31-46.
7. Nigg, B.M., **Stefanyshyn, D.J.** and Cole, G.K (2003) Criteria for functional biomechanical testing of sport surfaces. In *Sport Surfaces – Biomechanics, Injuries, Performance, Testing and Installation*, Editors. B.M. Nigg, G.K. Cole and D.J. Stefanyshyn, University of Calgary, Calgary, Canada. pp 311-334.

8. **Stefanyshyn, D.J.** (2003) Joint moments, sport surfaces and sport injuries. In *Sport Surfaces – Biomechanics, Injuries, Performance, Testing and Installation*, Editors. B.M. Nigg, G.K. Cole and D.J. Stefanyshyn, University of Calgary, Calgary, Canada. pp 89-106.
9. Cole, G.K., **Stefanyshyn, D.J.** and Nigg, B.M. (2003) A novel method for testing traction of sport surfaces. In *Sport Surfaces – Biomechanics, Injuries, Performance, Testing and Installation*, Editors. B.M. Nigg, G.K. Cole and D.J. Stefanyshyn, University of Calgary, Calgary, Canada. pp 253-268.
10. Nigg, B.M., Cole, G.K. and **Stefanyshyn, D.J.** (2003) Impact forces during exercise and sport activities. In *Sport Surfaces – Biomechanics, Injuries, Performance, Testing and Installation*, Editors. B.M. Nigg, G.K. Cole and D.J. Stefanyshyn, University of Calgary, Calgary, Canada. pp13-29.
11. Nigg, B.M., Cole, G.K. and **Stefanyshyn, D.J.** Editors. (2003) *Sport Surfaces – Biomechanics, Injuries, Performance, Testing and Installation*, University of Calgary, Calgary, Canada.
12. Van Horne, S. and **Stefanyshyn, D.** (2003) Klap skate pivot point position and Olympic speed skating performance. *Speed Skating World, Vol. 7, May-June-July*, 20-21.
13. **Stefanyshyn, D.J.** and Fusco, C. (2002) The shoe in sprinting. *Track Coach, Vol 159, 5082-5084*.
14. Nigg, B.M., Schwameder, D., **Stefanyshyn, D.** and von Tscharnar, V. (2001) The effect of ski binding position on performance and comfort in skiing. In *Science and Skiing II*, Editors E. Müller, H. Schwameder, C. Raschner, S. Lindinger and E. Kornexl. Verlag Dr. Kovač. pp 3-13.
15. Schwameder, H., Nigg, B.M., von Tscharnar, V. and **Stefanyshyn, D.** (2001) The effect of binding position on kinetic variables in alpine skiing. In *Science and Skiing II*, Editors E. Müller, H. Schwameder, C. Raschner, S. Lindinger and E. Kornexl. Verlag Dr. Kovač. pp 43-54.
16. **Stefanyshyn, D.J.** and Nigg, B.M. (2000) Work and energy influenced by sports equipment. In *Biomechanics and Biology of Human Movement*, Editors B.M. Nigg, B.R. MacIntosh and J. Mester. Human Kinetics, Champaign, IL. pp. 49-65.
17. Nigg, B.M., **Stefanyshyn, D.J.** and Denoth, J. (2000) Work and energy – mechanical considerations. In *Biomechanics and Biology of Human Movement*, Editors B.M. Nigg, B.R. MacIntosh and J. Mester. Human Kinetics, Champaign, IL. pp. 5-18.
18. Hennig, E.M. and **Stefanyshyn, D.J.** Editors (1999) *Proceedings of the Fourth Symposium on Footwear Biomechanics*.
19. **Stefanyshyn, D. J.** and Nigg, B.M. (1998) Shoe biomechanics: an aid to the soccer player. *Proceedings of the Soccer Player Oriented Science and Technology Congress*.
20. Wright, I.C., **Stefanyshyn, D.J.** and Nigg, B.M. (1998) Letter to the Editor RE: Prevention of Ankle Injuries, Robbins, S. and Waked, E. *Sports Medicine, Vol. 26(1)*, 59-60.
21. **Stefanyshyn, D.J.** (1996) Mechanical energy contributions of the lower extremity joints to athletic performance. *PhD Thesis, Faculty of Engineering, University of Calgary*.

REFEREED ABSTRACTS

1. Worobets, J.T., Carpes, F.P. and **Stefanyshyn, D.J.** (2009) Evaluation of shoes that estimate metabolic cost during walking. *Proceedings of the Brazilian Biomechanics Congress*.

2. Worobets, J.T., Wannop, B., Luo, G. and **Stefanyshyn, D.J.** (2009) The influence of elastic athletic apparel on hip joint mechanics and ground reaction impulses during a sprint start. *Proceedings of the International Society of Biomechanics Conference.* .
3. Wannop, J.W., Worobets, J.T. and **Stefanyshyn, D.J.** (2009) Footwear traction and joint loading. *Proceedings of the International Society of Biomechanics Conference.*
4. Worobets, J., Wannop, B., Luo, G. and **Stefanyshyn, D.** (2009) The influence of elastic athletic apparel on hip joint mechanics and ground reaction impulses during a sprint start. *Proceedings of the International Society of Biomechanics Conference.*
5. Luo, G., Stergiou, P., Worobets, J., Nigg, B. and **Stefanyshyn, D.** (2009) Footwear comfort and running performance. *Proceedings of the International Society of Biomechanics Conference.*
6. Luo, G., Stergiou, P. and **Stefanyshyn, D.** (2009) Validation of a mechanical method for golf footwear stability measurement. *Proceedings of the VIIIth Footwear Biomechanics Symposium.*
7. **Stefanyshyn, D.J.**, Lee, J.S., Park, S.K. (2009) The influence of soccer cleat design on joint moments. *Proceedings of the VIIIth Footwear Biomechanics Symposium.*
8. Wannop, B., Luo, G. and **Stefanyshyn, D.** (2009) Traction properties of footwear in Canadian high school football. *Proceedings of the VIIIth Footwear Biomechanics Symposium.*
9. Park, S.K., **Stefanyshyn, D.**, Hart, D., Ramage, B. and Ronsky, J. (2009) Hormone responses, knee joint laxity and knee joint moments during movement in healthy females. *Proceedings of the International Society of Biomechanics Conference.*
10. Carpes, F.P., Diefenthaler, F., Bini, R.R., **Stefanyshyn, D.**, Faria, I.E. and Mota, C.B. (2009) Influence of experience and leg preference on mechanical efficiency of cycling. *Proceedings of the Brazilian Biomechanics Congress.*
11. Carpes, F.P., Dagnese, F., de Assis Martins E., Wiest, M., Padoin, P., Lorenzen, T., **Stefanyshyn, D.**, Mota, C.B. (2009) Muscle activation during incremental cycling using rotor cranks. *Proceedings of the Brazilian Biomechanics Congress.*
12. Park, S.B., **Stefanyshyn, D.**, Worobets, J., Park, S.K., Lee, J., Lee, K. and Park, J. (2009) Biomechanical aspects of badminton shoe during a lunge. *Proceedings of the International Society of Biomechanics of Sport Congress.*
13. Al Tunaiji, H., Mohtadi, N., **Stefanyshyn, D.** and Wiley, P. (2009) The long arm standardized goniometer (LSG) versus non standardized goniometric methods in measuring the resting foot angle from prone position among healthy individuals. *Canadian Academy of Sports Medicine Annual Meeting.*
14. Poirier, L. Lozowski, E. P., Maw, S., **Stefanyshyn, D.J.** and Thompson, R.I. (2009) Fresh approach to bobsleigh runner design. *Proceedings of the Canadian Association of Physicists 2009 Congress.*
15. Poirier, L. Lozowski, E. P., Maw, S., **Stefanyshyn, D.J.** and Thompson, R.I. (2008) Optimization of rocker measurements with a portable gauge. *Proceedings of the Canadian Association of Physicists 2008 Congress.*
16. **Stefanyshyn, D.J.** (2008) Can footwear influence sport performance. *Proceedings of the Sixth Brazilian Symposium on Footwear Biomechanics.*
17. **Stefanyshyn, D.J.** (2008) Is footwear comfort related to injury. *Proceedings of the Sixth Brazilian Symposium on Footwear Biomechanics.*

18. Edgecombe, T. and **Stefanyshyn, D.** (2007) A correlation between manufacturers' binding position and the mechanical characteristics of skis.
19. **Stefanyshyn, D.J.** (2007) Knee angular impulse as a predictor of patellofemoral pain in runners. *Syllabus of the 10th Annual International Conference on Foot Biomechanics & Orthotic Therapy*, C11-C13.
20. Worobets, J. T. and **Stefanyshyn, D.J.** (2007) Shaft stiffness significantly influences golf clubhead speed at impact. *Journal of Biomechanics*, Vol. 40(S2), S279.
21. Park, S.K., **Stefanyshyn D.J.**, Hart D.A., Loitz-Ramage B., Ronsky J.L. (2007) Influence of hormones on knee joint laxity and joint mechanics in healthy females. *Journal of Biomechanics*, Vol. 40(S2), S142.
22. **Stefanyshyn, D.J.** (2007) Can footwear affect sports performance? *Proceedings of the VIIth Footwear Biomechanics Symposium*, 21-22.
23. Luo, G and **Stefanyshyn, D.J.** (2007) Forefoot midsole bending stiffness during cutting movements. *Proceedings of the VIIth Footwear Biomechanics Symposium*, 33-34.
24. **Stefanyshyn, D.J.** (2007) From strain to pain – a movement too far. The aetiology of chronic overuse injuries in athletes. *Abstracts of the 5th Staffordshire Conference on Clinical Biomechanics*, 6.
25. **Stefanyshyn, D.J.** (2007) Joint moments and lower extremity injury – the influence of footwear and orthotics. *Abstracts of the 5th Staffordshire Conference on Clinical Biomechanics*, 8-9
26. Worobets, J. T. and **Stefanyshyn, D.J.** (2006) Influences of equipment and athlete on shooting speed in ice hockey. *Abstracts of the XIVth Biennial Conference for the Canadian Society for Biomechanics*, 58.
27. **Stefanyshyn, D.J.** (2006) The influence of football cleat design on joint loading. *Abstracts of the 11th annual Congress of the European College of Sport Science*, 224.
28. **Stefanyshyn, D.J.** (2006) Angular impulse and patellofemoral pain in runners. *Abstracts of the 5th World Congress of Biomechanics, Journal of Biomechanics*, Vol. 39, Supp. 1, S173-S174.
29. **Stefanyshyn, D.J.** (2006) Footwear traction and knee joint moments. *Abstracts of the 5th World Congress of Biomechanics, Journal of Biomechanics*, Vol. 39, Supp. 1, S181.
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38. Worobets, J.T. and **Stefanyshyn, D.J.** (2005) Normalizing vertical ground reaction force peaks to body weight in heel-toe running. *Proceedings of the 7th Symposium on Footwear Biomechanics*, 132-133.
39. **Stefanyshyn, D.J.**, Worobets, J.T. and Anderson, B. (2004) Footwear that allows relative horizontal movement between the foot and outsole reduces knee joint moments during running. *Proceedings of the 28th Annual Conference of the American Society of Biomechanics*
40. **Stefanyshyn, D.J.** (2004) Sport equipment-energy and performance. *Proceedings of the 2004 International Sport Science Congress*.
41. **Stefanyshyn, D.J.**, Lee, J.S., Park, S.K. and Savage, L. (2004) The influence of soccer cleat design on knee joint moments. *Proceedings of the 13th Biennial Conference for the Canadian Society for Biomechanics*, 63.
42. Worobets, J.T. and **Stefanyshyn, D.J.** (2004) Correlations between ground reaction force components and body mass in heel-toe running. *Proceedings of the 13th Biennial Conference for the Canadian Society for Biomechanics*, 27.
43. Park, S.K. and **Stefanyshyn, D.J.** (2004) Influence of Q-angle on lower extremity joint moments in running. *Proceedings of the 13th Biennial Conference for the Canadian Society for Biomechanics*, 107.
44. **Stefanyshyn, D.J.** (2003) Mechanisms of Overuse Injuries in Sports. *Proceedings of the VIIth IOC Olympic World Congress on Sport Sciences*, 4E.
45. Van Horne, S. and **Stefanyshyn, D.J.** (2003) Mechanical effects of a modified point of foot rotation during the speed skating push. *Proceedings of the International Society of Biomechanics XIXth congress*.
46. **Stefanyshyn, D.J.** (2003) Technology and speed skating performance. *Book of abstracts of the 8th Annual Congress of the European College of Sport Science*, 321-322.
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48. **Stefanyshyn, D.J.**, Stergiou, P., Nigg, B.M., Rozitis, A.I. and Goepfert, B. (2003) Do females require different running footwear? *Proceedings of the Sixth Symposium on Footwear Biomechanics*, 91-92.
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52. **Stefanyshyn, D.J.**, Krell, J.R. and Chow, D. L. (2002) Metatarsophalangeal joint movement in Olympic sprinters. *Medicine and Science in Sports and Exercise, Sixth IOC Congress on Sports Sciences, Vol. 34, 5S*, 106.

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54. Van Horne, S., and **Stefanyshyn, D.** (2002) Application of a modified slide board for speed skate analysis. *Proceedings of the VIIIth EMED Scientific Meeting.*
55. Roy, J-P. R. and **Stefanyshyn, D.** (2002) Influence of the metatarsophalangeal joint bending and shoe sole length on jump height performance. *Proceedings of the Fourth World Congress of Biomechanics.*
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58. **Stefanyshyn, D.J.**, Baroud, G. and Nigg, B.M. (2001) The potential of structured surfaces. *Book of Abstracts of the 6th Annual Congress of the European College of Sport Science*, 90.
59. Nigg, B.M., **Stefanyshyn, D.J.** and Cole, G. (2001) Work and energy during locomotion. *Book of Abstracts of the 6th Annual Congress of the European College of Sport Science*, 27.
60. **Stefanyshyn, D.J.** and Fusco, C. (2001) Increased bending stiffness increases sprint performance. *Proceedings of the International Society of Biomechanics XVIIIth Congress*, 10.
61. Nigg, B.M., Cole, G., Stergiou, P. and **Stefanyshyn, D.** (2000) The use of pressure measurements to determine the effect of shoe orthotics on knee joint moments. *Clinical Biomechanics, Vol. 16, 846-847.*
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63. **Stefanyshyn, D.J.**, Stergiou, P., Lun, V.M.Y. and Meeuwisse, W.H. (2001) Dynamic variables and injuries in running. *Proceedings of the Fifth Symposium on Footwear Biomechanics*, 74-75.
64. Mündermann, A., Nigg, B.M., **Stefanyshyn, D.J.** and Humble, R.N. (2001) A reliable measure to assess footwear comfort. *Proceedings of the Fifth Symposium on Footwear Biomechanics*, 64-65.
65. **Stefanyshyn, D. J.**, Stergiou, P., Nigg, B.M., Lun, V.M.Y. and Meeuwisse, W.H. (2000) The relationship between impact forces and running injuries. *Abstracts of the XXVth Congress of the Societe de Biomecanique and the XIth Congress of the Canadian Society for Biomechanics*, 43.
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71. Baroud, G., **Stefanyshyn, D.J.** and Bellchamber, T. (1999) Performance enhancement of hockey sticks using numerical simulations. *Proceedings of the International Society of Biomechanics XVIIth Congress*, 827.
72. **Stefanyshyn, D.J.** and Nigg, B.M. (1999) Influence of midsole bending stiffness on joint energy and jump height performance. *Proceedings of the International Society of Biomechanics XVIIth Congress*, 236.
73. Stergiou, P., **Stefanyshyn, D.J.**, Nigg, B.M., Lun, V.M.Y., and Meeuwisse, W.H. (1999) Knee joint loading and patellofemoral pain syndrome in runners: *Proceedings of the International Society of Biomechanics XVIIth Congress*, 306.
74. Sasse, M., Nigg, B.M. and **Stefanyshyn, D.J.** (1999) The influence of ankle fractures and deltoid ligament transection on the tibiotalar joint movement during dorsiflexion/plantarflexion. *Proceedings of the International Society of Biomechanics XVIIth Congress*, 496.
75. Miller, J.E., Nigg, B.M. and **Stefanyshyn, D.J.** (1999) Arch stiffness and torsion of the foot in barefoot locomotion. *Proceedings of the International Society of Biomechanics XVIIth Congress*, 513.
76. Baroud, G., Nigg, B.M. and **Stefanyshyn, D.J.** (1999) Can athletic performance be enhanced by sport surfaces and sport shoes? *Proceedings of the International Society of Biomechanics XVIIth Congress*, 237.
77. Schollhorn, W.I., **Stefanyshyn, D.J.**, Nigg, B.M. and Liu, W. (1999) The effect of shoe heel height on walking patterns of females. *Proceedings of the International Society of Biomechanics XVIIth Congress*, 255.
78. **Stefanyshyn, D.J.**, Stergiou, P., Lun, V.M.Y., Meeuwisse, W.H. and Nigg, B.M. (1999) Knee joint moments and patellofemoral pain syndrome in runners Part I: A case control study, Part II: A prospective cohort study. *Proceedings of the Fourth Symposium on Footwear Biomechanics*, 86-87. Ed. E.M. Hennig & D.J. Stefanyshyn. Published by: University of Calgary, Calgary, Canada. Aug 5-7, 1999 Canmore
79. Baroud, G., Goerke, U.J., Guenther, H., **Stefanyshyn, D.J.**, Miller, J.E. and Nigg, B.M. (1999) A non-linear hyperelastic finite element model of energy return enhancement in sport surfaces and shoes. *Proceedings of the Fourth Symposium on Footwear Biomechanics*, 18-19.
80. **Stefanyshyn, D.J.** and Nigg, B.M. (1998) The influence of visco-elastic midsole components on the biomechanics of running. *Abstracts of the Third World Congress of Biomechanics*, 379.
81. Lee, S., **Stefanyshyn, D.J.** and Nigg, B.M. (1998) Dynamic characterization of relative forefoot abduction. *Proceedings of the Third North American Congress on Biomechanics*, 139-140.
82. Nurse, M. A., Nigg, B.M., **Stefanyshyn, D.J.**, Liu, W. and Miller, J.E. (1998) Differences in the sensation of the plantar surface of the human foot. *Proceedings of the Third North American Congress on Biomechanics*, 145-146.
83. Miller, J.A., Nigg, B.M., **Stefanyshyn, D.J.** (1998) In/eversion measurement differences using different markers on the shoe and foot. *Proceedings of the Third North American Congress on Biomechanics*, 445-446.
84. Sasse, M., Nigg, B.M. and **Stefanyshyn D.** (1998) The influence of ankle fractures and deltoid ligament transection on the tibiotalar joint movement during dorsiflexion/plantarflexion. *Transactions of the 44th Annual Meeting of the Orthopaedic Research Society*, 724.

85. **Stefanyshyn, D.J.**, Nigg, B.M., Khan, A. and Fisher, V. (1997) Shoe insert construction influences foot and leg movement. *Proceedings of the Third Symposium on Footwear Biomechanics*, 28-29.
86. Lee, S., Muller, C., **Stefanyshyn, D.**, Nigg, B.M. and Freychat, P. (1997) Forefoot abduction and its relation to changes in foot length. *Proceedings of the Third Symposium on Footwear Biomechanics*, 70.
87. **Stefanyshyn, D.J.** and Nigg, B.M. (1996) Mechanical energy of the metatarsophalangeal joint in sport activities. *Proceedings of the 9th Biennial Conference of the Canadian Society for Biomechanics*, 276-277.
88. **Stefanyshyn, D.** (1995) The spring-like nature of the ankle joint during running and sprinting. *Proceedings of the Third IOC World Congress on Sport Sciences*, 90-91.
89. **Stefanyshyn, D.J.** and Engsberg, J.R. (1994) Right to left differences of ankle joint complex range of motion (abstract). *Journal of Biomechanics*, Vol. 27 (6), 816.
90. **Stefanyshyn, D.**, Engsberg, J., Tedford, K., and Harder, J. (1994) A method to determine the influence of prosthetic features in preventing below-knee amputees from walking like able-bodies. *Proceedings of the 8th Biennial Conference of the Canadian Society for Biomechanics*, 52-53.
91. **Stefanyshyn, D.J.** and Engsberg, J.R. (1993) Right to left differences of ankle joint complex range of motion. *Proceedings of the International Society of Biomechanics XIV Congress*, 1284-1285.

PRESENTATIONS

1. **Stefanyshyn, D.J.** (2009) *Invited Symposia Speaker* Sports Equipment Energy and Performance? ? 9th Biennial Footwear Biomechanics Symposium, Stellenbosch, South Africa.
2. **Stefanyshyn, D.J.** (2009) *Keynote Speaker* Running Shoe Research and Footwear Development. Busan International Footwear & Leather Show, Busan, Korea
3. **Stefanyshyn, D.J.** (2009) *Invited Speaker* Running Shoe Research and Footwear Development. 12th Annual International Conference on Foot Biomechanics & Orthotic Therapy. Atlanta, USA.
4. **Stefanyshyn, D.J.** (2009) *Invited Speaker* Basic Running Research and Footwear Development. ASTM Annual meeting. Vancouver, Canada.
5. **Stefanyshyn, D.J.** (2009) *Invited Speaker* Shoe Technology. Runners Edge 2009: Calgary's Running Expo, Calgary, Canada.
6. **Stefanyshyn, D.J.** (2008) *Keynote Speaker* Sports Equipment Energy and Performance? 3rd Congress of the Hellenic Society of Biomechanics. Athens, Greece.
7. **Stefanyshyn, D.J.** (2008) *Invited Speaker* Sport biomechanics, equipment innovation, performance and injury. University of Chemnitz, Germany.
8. **Stefanyshyn, D.J.** (2008) *Keynote Speaker* Can footwear influence sport performance? Sixth Brazilian Symposium on Footwear Biomechanics. Novo Hamburgo, Brazil.
9. **Stefanyshyn, D.J.** (2008) *Keynote Speaker* Is footwear comfort related to injury? Sixth Brazilian Symposium on Footwear Biomechanics. Novo Hamburgo, Brazil.
10. **Stefanyshyn, D.J.** (2008) *Invited Speaker* Sport biomechanics, equipment innovation, performance and injury. Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil

11. **Stefanyshyn, D.J.** (2007) *Invited Speaker* Knee angular impulse as a predictor of patellofemoral pain in runners. 10th Annual International Conference on Foot Biomechanics & Orthotic Therapy. San Diego, USA.
12. **Stefanyshyn, D.J.** (2007) *Keynote Speaker* Can footwear affect sport performance? 8th Biennial Footwear Biomechanics Symposium, Taipei, Taiwan.
13. **Stefanyshyn, D.J.** (2007) *Keynote Speaker* From strain to pain, a movement too far? The aetiology of chronic overuse injuries in athletes. 5th Staffordshire Conference on Clinical Biomechanics, Stoke-on-Trent, UK.
14. **Stefanyshyn, D.J.** (2007) *Keynote Speaker* Joint moments and lower extremity injury – the influence of footwear and orthotics. 5th Staffordshire Conference on Clinical Biomechanics, Stoke-on-Trent, UK.
15. **Stefanyshyn, D.J.** (2007) *Invited Speaker* Sports equipment, energy and performance. Loughborough University Wolfson School Seminar, Loughborough, UK.
16. **Stefanyshyn, D.J.** (2006) *Keynote Speaker* Player surface interactions: injury and performance. SportSurf 3rd Workshop, Exeter, UK.
17. **Stefanyshyn, D.J.** (2006) *Keynote Speaker* Biomechanical development and evaluation of functional sports footwear. Busan International Footwear & Leather Show, Busan, Korea.
18. **Stefanyshyn, D.J.** (2006) *Invited Speaker* Sports equipment – energy and performance. Silla University, Busan, Korea.
19. **Stefanyshyn, D.J.** (2006) *Invited Speaker* Sport equipment innovation - performance and injury. Korean National Sport University, Seoul, Korea.
20. **Stefanyshyn, D.J.** (2006) *Invited Symposia Speaker* Has biomechanics decreased lower extremity injuries in sports? XIVth Biennial Conference for the Canadian Society for Biomechanics, Waterloo, Canada.
21. **Stefanyshyn, D.J.** (2006) *Keynote Speaker* Sports equipment – energy and performance. XXIVth International Symposium on Biomechanics in Sports, Salzburg, Austria.
22. **Stefanyshyn, D.J.** (2006) *Invited Symposia Speaker* The influence of ground control footwear on knee joint moments during running. XXIVth International Symposium on Biomechanics in Sports, Salzburg, Austria.
23. **Stefanyshyn, D.J.** (2006) *Keynote Speaker* Footwear traction and knee joint moments. 5th World Congress of Biomechanics, Munich, Germany.
24. **Stefanyshyn, D.J.** and Worobets, J.T. (2006) *Invited Symposia Speaker* Energy return of hockey sticks and puck speed. 5th World Congress of Biomechanics, Munich, Germany.
25. **Stefanyshyn, D.J.** (2006) *Invited Symposia Speaker* Angular impulse and patellofemoral pain in runners. 5th World Congress of Biomechanics, Munich, Germany.
26. **Stefanyshyn, D.J.** (2006) *Invited Symposia Speaker* The influence of football cleat design on joint loading. 11th annual Congress of the European College of Sport Science, Lausanne, Switzerland.
27. **Stefanyshyn, D.J.**, (2005) *Invited Speaker* Joint moments and lower extremity injury – the influence of footwear and orthotics. Pedorthic Association of Canada Symposium – Biomechanics: moving forward. Calgary, Canada.
28. **Stefanyshyn, D.J.**, Lee, J.S., Park, S.K. and Savage, L. (2004) *Invited Symposia Speaker* The influence of soccer cleat design on knee joint moments. 13th Biennial Conference for the Canadian Society for Biomechanics, Halifax, Canada.

29. **Stefanyshyn, D.J.** (2004) *Keynote Speaker* Shoe bending stiffness affects running, sprinting and jumping performance. The Second Korea Footwear Biomechanics Symposium, Busan, Korea.
30. **Stefanyshyn, D.J.** (2004) *Keynote Speaker* Running shoes – do impact forces and pronation cause running injuries? The Second Korea Footwear Biomechanics Symposium, Busan, Korea.
31. **Stefanyshyn, D.J.** (2004) *Invited Speaker* Joint loading and injury prevention in sports. Korean Sport Science Institute, Seoul, Korea.
32. **Stefanyshyn, D.J.** (2004) *Invited Speaker* Sport equipment-energy and performance. 2004 International Sport Science Congress, Daejeon, Korea.
33. **Stefanyshyn, D.J.** (2004) *Invited Speaker* Knee joint moments – a potential factor in running injuries? University of Massachusetts Department of Exercise Science Seminar Series, Amherst, USA.
34. **Stefanyshyn, D.J.,** Worobets, J.T. and Anderson, B. (2004) *Invited Symposia Speaker* Footwear that allows relative horizontal movement between the foot and outsole reduces knee joint moments during running. 28th Annual Conference of the American Society of Biomechanics, Portland, USA.
35. **Stefanyshyn, D.J.** and Nigg, B.M. (2003) *Invited Speaker* Energy and performance aspects in sports surfaces. 3rd Calgary Symposium on Sport Surfaces, Calgary, Canada.
36. **Stefanyshyn, D.J.** (2003) *Invited Speaker* Joint moments, sport surfaces and sport injuries. 3rd Calgary Symposium on Sport Surfaces, Calgary, Canada.
37. **Stefanyshyn, D.J.** (2003) *Invited Speaker* Mechanisms of Overuse Injuries in Sports. VIIth IOC Olympic World Congress on Sport Sciences, Athens, Greece.
38. **Stefanyshyn, D.J.** (2003) *Invited Symposia Speaker* Technology and speed skating performance. 8th Annual Congress of the European College of Sport Science, Salzburg, Austria.
39. **Stefanyshyn, D.J.,** Stergiou, P., Nigg, B.M., Rozitis, A.I. and Goepfert, B. (2003) Do females require different running footwear? *Sixth Symposium on Footwear Biomechanics*, Queenstown, New Zealand.
40. **Stefanyshyn, D.J.,** Stergiou, P., Nigg, B.M., Rozitis, A.I. and Goepfert, B. (2003) Do pronators pronate? *Sixth Symposium on Footwear Biomechanics*, Queenstown, New Zealand.
41. **Stefanyshyn, D.J.** and Krell, J.R. (2002) *Invited Symposia Speaker* The influence of the metatarsophalangeal joint on sprinting performance. 6th IOC World Congress on Sport Sciences, St. Louis, USA.
42. **Stefanyshyn, D.J.** and Van Horne, S.M. (2002) *Invited Symposia Speaker* The influence of klapskate hinge position on long track speed skating performance. 6th IOC World Congress on Sport Sciences, St. Louis, USA.
43. **Stefanyshyn, D.J.,** Stergiou, P., Lun, V.M.Y. and Meeuwisse, W.H. (2002) *Invited Symposia Speaker* Lower extremity mechanics in runners with patellofemoral joint pain. 49th Annual Meeting of the American College of Sports Medicine, St. Louis, USA.
44. **Stefanyshyn, D.J.,** Baroud, G. and Nigg, B.M. (2001) *Invited Symposia Speaker* The potential of structured surfaces. 6th Annual Congress of the European College of Sport Science, Cologne, Germany.
45. **Stefanyshyn, D.J.** and Fusco, C. (2001) *Invited Symposia Speaker* Increased bending stiffness increases sprint performance. *International Society of Biomechanics XVIIIth Congress*, Zurich, Switzerland.
46. **Stefanyshyn, D.J.,** Stergiou, P., Lun, V.M.Y. and Meeuwisse, W.H. (2001) Dynamic variables and injuries in running. *Fifth Symposium on Footwear Biomechanics*, Zurich, Switzerland.

47. **Stefanyshyn, D. J.**, Stergiou, P., Nigg, B.M., Lun, V.M.Y. and Meeuwisse, W.H. (2000) The relationship between impact forces and running injuries. *XXVth Congress of the Societe de Biomecanique and the XIth Congress of the Canadian Society for Biomechanics*, Montreal, Canada.
48. **Stefanyshyn, D.J.** and Nigg, B.M. (1999) *Invited Symposia Speaker* Influence of midsole bending stiffness on joint energy and jump height performance. *International Society of Biomechanics XVIIth Congress*, Calgary, Canada.
49. **Stefanyshyn, D.J.**, Stergiou, P., Lun, V.M.Y., Meeuwisse, W.H. and Nigg, B.M. (1999) Knee joint moments and patellofemoral pain syndrome in runners Part I: A case control study, Part II: A prospective cohort study. *Fourth Symposium on Footwear Biomechanics*, Canmore, Canada.
50. **Stefanyshyn, D.J.** and Nigg, B.M. (1998) The influence of visco-elastic midsole components on the biomechanics of running. *Third World Congress of Biomechanics*, Sapporo, Japan.
51. **Stefanyshyn, D. J.** and Nigg, B.M. (1998) *Invited Speaker* Shoe biomechanics: an aid to the soccer player. *Soccer Player Oriented Science and Technology Congress*, Lyon, France.
52. **Stefanyshyn, D.J.**, Nigg, B.M., Khan, A. and Fisher, V. (1997) Shoe insert construction influences foot and leg movement. *Third Symposium on Footwear Biomechanics*, Tokyo, Japan.
53. **Stefanyshyn, D.J.** (1997) *Invited Speaker* Foot biomechanics and athletic footwear. *Runners Soul Lecture Series*, Lethbridge, Canada.
54. **Stefanyshyn, D.J.** and Nigg, B.M. (1996) Mechanical energy of the metatarsophalangeal joint in sport activities. *Canadian Society for Biomechanics 9th Biennial Conference*, Burnaby, Canada.
55. **Stefanyshyn, D.** and Nigg, B.M. (1995) The spring-like nature of the ankle joint during running and sprinting. *Third IOC World Congress on Sport Sciences*, Atlanta, USA.
56. **Stefanyshyn, D.**, Engsberg, J., Tedford, K., and Harder, J. (1994) A method to determine the influence of prosthetic features in preventing below-knee amputees from walking like able-bodies. *Canadian Society for Biomechanics 8th Biennial Conference*, Calgary, Canada.
57. Harder, J.A., **Stefanyshyn, D.**, Engsberg, J., and Tedford, K. (1994) Prosthetic features and the gait of below-knee amputee children pilot study. *28th Annual Meeting of the Canadian Orthopaedic Research Society*, Winnipeg, Canada.
58. **Stefanyshyn, D.J.** and Engsberg, J.R. (1993) Right to left differences of ankle joint complex range of motion. *International Society of Biomechanics XIV Congress*, Paris, France.
59. **Stefanyshyn, D.J.**, Engsberg, J.R., Harder, J.A., Tedford, K.G., and Schneider, M. (1993) Quantifying the effects of specific prosthetic features of below knee amputees - pilot study. *Association of Childrens Prosthetic and Orthotics Clinics Annual Meeting*, St. Petersburg, U.S.A.

TECHNICAL RESEARCH REPORTS

1. Stergiou, P. and **Stefanyshyn, D.J.** (2009) Mechanical testing of golf shoes part III. *Research and Testing Report for TaylorMade adidas Golf*.
2. Worobets, J.T., Smith, G. and **Stefanyshyn, D.J.** (2009) Exploring position and force control strategies in the golf swing. *Research Report for TaylorMade adidas Golf*.
3. Osis, S.T. and **Stefanyshyn, D.J.** (2009) Influence of sprint shoe stiffness on sprint performance. *Research Report for adidas International*.

4. Worobets, J.T, Wannop, J.W. and **Stefanyshyn, D.J.** (2009) Influence of powerweb stiffness on hip joint mechanics, energy storage and performance during sprinting and jumping. . *Research Report for adidas International.*
5. Stergiou, P. and **Stefanyshyn, D.J.** (2009) Mechanical testing of golf shoes. *Research and Testing Report for TaylorMade adidas Golf.*
6. Stergiou, P. and **Stefanyshyn, D.J.** (2009) Badminton footwear II. *Research Report for Korean Footwear International and Haksan Inc.*
7. **Stefanyshyn, D. J.**, Osis, S., Worobets, J., Neubauer, J. and Van Dijk, W. (2008) Anti-slip footwear recommendations. *Research and Development Report for Mark's Work Wearhouse.*
8. Stergiou, P. and **Stefanyshyn, D.J.** (2008) Golf shoe stability: biomechanical and mechanical testing methods. *Research and Testing Report for Taylormade adidas Golf.*
9. Osis, S., **Stefanyshyn, D.J.**, Worobets, J.T. (2008) Anti Slip Footwear– Human Slipping Study. *Research and Development Report for Mark's Work Wearhouse.*
10. Osis, S., **Stefanyshyn, D.J.**, Worobets, J.T. (2008) Anti Slip Footwear–Slip Testing Apparatus. *Research and Development Report for Mark's Work Wearhouse.*
11. Worobets, J. and **Stefanyshyn, D.J.** (2008) Airun shoe validation. Research and Testing Report for *Korean Footwear International and Aison Inc.*
12. Osis, S., Worobets, J. and **Stefanyshyn, D. J.** (2008) Anti-slip footwear prototype and concept testing. *Research and Development Report for Mark's Work Wearhouse.*
13. **Stefanyshyn, D.J.**, Visch, W., van der Wal, H. and Worobets, J.T. (2008) Badminton footwear. *Research Report for Korean Footwear International and Haksan Inc.*
14. Smith, G. and **Stefanyshyn, D.J.** (2008) Sledge hockey equipment evaluation. *Research and Development Report for Top Secret Own the Podium 2010.*
15. **Stefanyshyn, D.J.**, Graf, E., Wannop, J.W. and Worobets, J.T. (2008) Footwear torsion. *Research Report for adidas International.*
16. Smith, G., **Stefanyshyn, D.J.**, Worobets, J.T. and Osis, S. (2008) Sledge hockey development. *Research and Development Report for Top Secret Own the Podium 2010.*
17. Wannop, J.W., Worobets, J.T. and **Stefanyshyn, D.J.** (2008) Speed skate elastic apparel development. *Research and Development Report for Top Secret Own the Podium 2010.*
18. Worobets, J.T., Wannop, J.W. and **Stefanyshyn, D.J.** (2008) Klap mechanism revolution. *Research and Development Report for Top Secret Own the Podium 2010.*
19. **Stefanyshyn, D.J.**, Smith, G. and Worobets, J.T. (2008) The influence of pure power mouthguards on golf performance. *Research Report for Pure Power Athletics.*
20. Worobets, J.T., Wannop, J.W. and **Stefanyshyn, D.J.** (2008) Formotion hiking on level ground. *Research Report for adidas International.*
21. **Stefanyshyn, D.J.**, Smith, G. and Worobets, J.T. (2007) Swing weight preference. *Research Report for adidas TaylorMade Golf.*

22. Worobets, J.T., Wannop, J.W., Luo, G. and **Stefanyshyn, D.J.** (2007) Influence of performance apparel on hip joint mechanics during sprinting and jumping. *Research Report for adidas International.*
23. Worobets, J.T., Osis, S. and **Stefanyshyn, D.J.** (2007) Achillex system validation. *Research Report for adidas International.*
24. **Stefanyshyn, D.J.** and Osis, S. (2007) Running injuries. *Literature Review Report for adidas International.*
25. Luo, G., Park, S.K. and **Stefanyshyn, D.J.** (2007) Performance and comfort of Mooto taekwondo shoes. *Research Report for Korea Footwear International.*
26. **Stefanyshyn, D.J.**, Smith, G. (2007) EMG and golfer preference – a pilot study. *Research Report for TaylorMade adidas Golf.*
27. **Stefanyshyn, D.J.**, Osis, S., Tremblay, L. and Park, S.K. (2006) The biomechanics of walking in the staffild health shoe. *Research Report for Korea Footwear International.*
28. **Stefanyshyn, D.J.**, Smith, G., Osis, S. and Nigg, B.M. (2006) Formotion golf footwear. *Research Report for adidas International.*
29. Wannop, B., **Stefanyshyn, D.J.**, Nigg, B.M. and Worobets, J.T. (2006) Analysis of formotion basketball footwear. *Research report for adidas International.*
30. **Stefanyshyn, D.J.** and Smith, G. (2006) Application of powerband footwear during the golf swing. *Research report for adidas Golf.*
31. **Stefanyshyn, D.J.** and Smith, G. (2006) Traction of clogged golf footwear. *Research report for TaylorMade-adidas Golf.*
32. **Stefanyshyn, D.J.** and Smith, G. (2006) The influence of upper body performance apparel on the golf swing. *Research report for adidas International.*
33. Osis, S., **Stefanyshyn, D.J.** and Nigg, B.M. (2006) Performance apparel. *Research report for adidas International.*
34. **Stefanyshyn, D.J.** and Osis, S (2006) Performance apparel – literature review and pilot study. *Research report for Own the Podium – Top Secret 2010.*
35. Osis, S. and **Stefanyshyn, D.J.** (2006) Speed skating double push. *Research report for Own the Podium – Top Secret 2010.*
36. Edgecombe, T. and **Stefanyshyn, D.J.** (2006) Influence of upper body apparel on performance in medicine ball chest throws. *Research report for adidas International.*
37. **Stefanyshyn, D.J.** and Anderson, B. (2006) Swing energy: strategies of club head speed generation in golf. *Research report for TaylorMade-adidas Golf.*
38. **Stefanyshyn, D.J.** and Fairbairn, J. (2005) Joint moments during running in forefoot GCS shoes. *Research report for adidas International.*
39. Osis, S. and **Stefanyshyn, D.J.** (2005) Muscle activity during running in adidas one shoes. *Research report for adidas International.*
40. **Stefanyshyn, D.J.** and Smith, G. (2005) Application of forefoot GCS footwear to golf – a pilot study. *Research report for adidas International.*

41. Nigg, B.M., MacDougall, D., MacDonald, S. and **Stefanyshyn, D.J.** (2005) Deformation, vibrations and damping of area-elastic sport surfaces. *Research report for Robbins Inc.*
42. Hettinga, B.A., Nigg, B.M. and **Stefanyshyn, D.J.** (2005) Oxygen consumption and muscle activity with a catapult composite shoe design. *Research report for EMA.*
43. Nigg, B.M., Hettinga, B.A. and **Stefanyshyn, D.J.** (2005) Comparison of biomechanical characteristics between barefoot, a “new” MBT product and the “standard” MBT. *Research report for Masai Barefoot Technology.*
44. Smith, G. and **Stefanyshyn, D.J.** (2005) Address Position Pilot Study - Assessing postural address position between drivers that differ in length by 1 inch. *Research report for TaylorMade-adidas Golf.*
45. **Stefanyshyn, D.J.** and Fried, A. (2005) Traction requirements of golf footwear II. *Research report for TaylorMade-adidas Golf.*
46. Worobets, J.T., McDougall, D., Fairbairn, J and **Stefanyshyn, D.J.** (2004) Muscle activity of downhill running with GCS footwear. *Research report for adidas International.*
47. **Stefanyshyn, D.J.** and Hettinga, B.A. (2004) Energy expenditure and cushioning of hiking footwear. *Research report for FNC Kolon Corporation.*
48. **Stefanyshyn, D.J.**, Anderson, B., Fried, A., Park, S.K. and Nigg, B.M. (2004) Traction requirements of golf footwear. *Research report for TaylorMade-adidas Golf.*
49. Worobets, J.T. and **Stefanyshyn, D.J.** (2004) Joint loading and performance with ground control system basketball footwear. *Research report for adidas International.*
50. **Stefanyshyn, D.J.**, Hettinga, B.A., Fairbairn, J.C., Gormley, T. and Worobets, J.T. (2004) Biomechanical evaluation of hiking/mountaineering shoes. *Research report for FNC Kolon Corporation.*
51. **Stefanyshyn, D.J.**, Anderson, B., Nigg, B.M. and Fairbairn, J. (2004) Soccer shoes and styles of play. *Research report for adidas International.*
52. Cole, G.K, van de Mosselaer, G and **Stefanyshyn, D.J.** (2004) A protocol for the testing of rotational traction of studded shoes on natural turf. *Testing report for adidas International.*
53. **Stefanyshyn, D.J.** and Worobets, J.T. (2004) Muscle activity and oxygen consumption in GCS footwear. *Research report for adidas International.*
54. **Stefanyshyn, D.J.** and Worobets, J.T. (2004) Recommendations for hockey stick breaking characteristics. *Research report for the National Hockey League.*
55. **Stefanyshyn, D.J.**, Anderson, B. and Nigg, B.M. (2004) Individually moldable boot inserts. *Research report for the Department of National Defense.*
56. **Stefanyshyn, D.J.**, Anderson, B., Gormley, T. and Nigg, B.M. (2004) Soccer cleats and soft tissue injuries phase II. *Research report for adidas International.*
57. **Stefanyshyn, D.J.**, Worobets, J.T. and Hettinga, B. (2004) Hockey sticks: the relationship between energy return and puck speed. *Research report for the National Hockey League.*
58. Ferber, R., **Stefanyshyn, D.J.** Weber, C., Gormley, T. and Nigg, B.M. (2004) Lister field infilled artificial turf testing. *Testing report for Cannon-Johnston Sport Architecture..*

59. **Stefanyshyn, D.J.**, Worobets, J.T. and Smith, C.R. (2003) Hockey stick breaking characteristics. *Research report for the National Hockey League.*
60. **Stefanyshyn, D.J.**, Ferber, R., Weber, C. and Anderson, B. (2003) Performance requirements of golf footwear. *Research report for TaylorMade-adidas Golf.*
61. Von Tscharnner, V., Anderson, B., **Stefanyshyn, D.J.** and Nigg, B.M. (2003) Swing recognition: functional grouping of golf kinematics. *Research report for TaylorMade Golf.*
62. Ferber, R., **Stefanyshyn, D.J.**, Uehli, K., Weber, C. and Nigg, B.M. (2003) Knee joint moments during cutting maneuvers and while running on uneven terrain in xyz shoes. *Research report for adidas International.*
63. Nigg, B.M., Hettinga, B., **Stefanyshyn, D.J.** and Cole, G. (2003) Vibration related products. *Report for adidas International.*
64. **Stefanyshyn, D.J.** (2003) Age and performance in high level sport. *Report for Canadian Heritage – Sport Canada.*
65. Nigg, B.M., Boyer, K. Wakeling, J., **Stefanyshyn, D.** and Cole, G. (2003) Shoe midsole materials, impact forces and soft tissue vibrations. *Research report for adidas International.*
66. **Stefanyshyn, D.J.**, Worobets, J., Anderson, B. and Nigg, B.M. (2002) Knee joint moments during running in XYZ shoes. *Research report for adidas International.*
67. Nigg, B.M., **Stefanyshyn, D.J.** and Rozitis, A. I. (2002) Sport Surfaces: Ankle and knee joint moments and lateral forgiveness. *Research report for Sport Court Ltd.*
68. **Stefanyshyn, D.J.**, Anderson, B., Roy, J.P. and Nigg, B.M. (2002) Soccer cleats and soft tissue injuries. *Research report for adidas International.*
69. **Stefanyshyn, D.J.**, Worobets, J. and Nigg, B.M. (2002) Properties of infilled artificial playing surfaces. *Testing report for Johnston Sport Architecture.*
70. Worobets, J.T. and **Stefanyshyn, D.J.** (2002) Lean angles and push-off forces during cornering in short track speed skating. *Research report for the University of Calgary Olympic Oval.*
71. **Stefanyshyn, D.J.**, Greenwald, M. and Auch, S. (2002) Olympic performance of the Canadian long-track speed skating team. *Research report for the University of Calgary Olympic Oval.*
72. Nigg, B.M., Boyer, K., Wakeling, J.M., **Stefanyshyn, D.J.** and Cole, G.K. (2002) Shoe sole materials, impact forces and soft tissue vibrations. *Research report for adidas International.*
73. **Stefanyshyn, D.J.**, Rozitis, A.I., Nigg, B.M. and Stergiou, P. (2002) Short-term and long-term comfort and EMG associated with shoe inserts. *Research report for the Department of National Defense.*
74. **Stefanyshyn, D.J.**, Stergiou, P., Nigg, B.M. Schollhorn, W. and von Tscharnner, V. (2002) Characterization of golfers based on their swing mechanics. *Research report for TaylorMade Golf.*
75. Rozitis, A., **Stefanyshyn, D.J.** and Nigg, B.M. (2002) Oxygen consumption aspects of a new running shoe design. *Testing report for Sydney Design Technologies Inc.*
76. **Stefanyshyn, D.J.**, Rozitis, A. and Krell, J. (2001) Olympic oval short-track rink board cushioning II. *Testing report for the University of Calgary Olympic Oval.*
77. **Stefanyshyn, D.J.**, Van Horne, S. and Morey-Sorrentino, R. (2001) Performance aspects of a new 3-dimensional speed skate design. *Research report for the University of Calgary Olympic Oval.*

78. **Stefanyshyn, D.J.**, Van Horne, S. and Nigg, B.M. (2001) Performance aspects of a new skate design: the FullFlex skate. *Research report for 713254 Alberta Ltd.*
79. **Stefanyshyn, D.J.**, Stergiou, P. and Nigg, B.M. (2001) Functional grouping of golf club designs: in depth analysis. *Research report for TaylorMade Golf.*
80. **Stefanyshyn, D.J.** and Van Horne, S. (2001) The influence of a flexible speed skate boot on angular energetics during a skating push. *Research report for the University of Calgary Olympic Oval.*
81. **Stefanyshyn, D.J.**, Stergiou, P., Nigg, B.M. Rozitis, A. and Goepfert, B. (2001) Pronation control, a functional analysis. *Research report for adidas International.*
82. **Stefanyshyn, D.J.**, Rozitis, A. and Krell, J. (2001) Olympic oval short-track rink board cushioning. *Testing report for the University of Calgary Olympic Oval.*
83. **Stefanyshyn, D.J.**, Stergiou, P., Nigg, B.M. and Horton, J. (2001) Functional grouping of golf club designs. *Research report for TaylorMade Golf.*
84. **Stefanyshyn, D.J.**, Rozitis, A. and Krell, J. (2001) Olympic oval long track padding. *Testing report for the University of Calgary Olympic Oval.*
85. **Stefanyshyn, D.J.** and Krell, J.B. (2000) Rink board padding testing and evaluation. *Testing report for the University of Calgary Olympic Oval.*
86. Hau, A., **Stefanyshyn, D.J.**, and Nigg, B.M. (2000) The effect of combat boot inserts on comfort, injury frequency and performance. *Research report for the Department of National Defense.*
87. **Stefanyshyn, D.J.**, Stergiou, P. and Nigg, B.M. (2000) The biomechanics of articulating heel shoes. *Research report for Kaj Gyr.*
88. **Stefanyshyn, D.J.**, Goepfert, B. and Nigg, B.M. (2000) The biomechanics of wave plate technology. *Research report for Mizuno Corporation.*
89. **Stefanyshyn, D.J.**, Nigg, B.M. and Thompson, M. (1999) Vanier gymnasium floor evaluation. *Testing report for Vanier Catholic Secondary School, Whitehorse, Yukon.*
90. Nigg, B.M., Stergiou, P., **Stefanyshyn, D.J.** and Cole, G.K (1999) Muscle tuning pendulum experiments. *Research report for adidas America Research and Innovation*
91. Nigg, B.M., Stergiou, P., **Stefanyshyn, D.J.**, Strudsholm, L., Krell, J. and Wakeling, J. (1999) Viscous and elastic shoe soles. *Research report for adidas America Research and Innovation.*
92. Stergiou, P, Cole, G.K, Nigg, B.M. and **Stefanyshyn, D.J.** (1999) Shoe comfort and oxygen consumption. *Research report for adidas America Research and Innovation.*
93. **Stefanyshyn, D.J.**, Nigg, B.M., Liu, W. and Bellchamber, T. L. (1998) Properties of sand-filled synthetic turfs. *An expert witness research report for Greenebaum Doll & McDonald.*
94. Baroud, G., Nigg, B.M. and **Stefanyshyn, D.** (1998) Tuning of sport surfaces and sport shoes for performance enhancement. *Research report for Mondo and adidas International.*
95. Liu, W., **Stefanyshyn, D.J.**, Nigg, B.M., Miller, J.E., and Nurse, M.A. (1998) The relationship of foot shape and sensitivity to comfort of shoe-inserts. *Research report for the Department of National Defense.*

96. Liu, W., **Stefanyshyn, D.J.**, Nigg, B.M., Miller, J.E., and Nurse, M.A. (1998) The influence of individual foot and leg characteristics on insert preference. *Research report for Schering-Plough Healthcare Products, Inc.*
97. Stergiou, P., Nigg, B.M., **Stefanyshyn, D.J.**, Hiebert, J. (1998) A test protocol to quantify the performance of court shoes. *Research report for adidas America Research and Innovation*
98. Lee, S., **Stefanyshyn, D.J.**, and Nigg, B.M. (1997) Hiking boot dynamics during incline and decline walking. *Research report for Decathlon Production Footwear Department.*
99. **Stefanyshyn, D.J.**, Nigg, B.M., Hiebert, J. and Stergiou, P. (1997) Pressure and balance in alpine skiing: A pilot study. *Research report for D. Blake Lowden.*
100. Lee, S., **Stefanyshyn, D.J.**, Nigg, B.M. and van der Vlist, I. (1997) Forefoot ab/adduction and arch dynamics in vivo. *Research report for Decathlon Production Footwear Department.*
101. **Stefanyshyn, D.J.**, Nigg, B.M., Fisher, R. and Hiebert, J.R. (1997) Biomechanical analysis of a new tennis shoe design. *Research report for Head Sport AG.*
102. **Stefanyshyn, D.J.**, Nigg, B.M., Nigg, S.R. and Hiebert, J.R. (1997) Friction tests for winter footwear. *Research report for CenAlta Well Services.*
103. **Stefanyshyn, D.J.**, Nigg, B.M., O'Flynn, B., Fisher, R. and Toogood, A. (1996) Influence of visco-elastic midsole components on the biomechanics of running. *Research report for adidas America Research and Innovation*
104. Nigg, B.M., **Stefanyshyn, D.J.** and Nigg, S.R. (1996) Biomechanical and material testing of sport shoes. *Research report for adidas America Research and Innovation*
105. **Stefanyshyn, D.J.**, Nigg, B.M., O'Flynn, B., Lee, S., Sasse, M. and Fisher, R. (1996) Medio-lateral stiffness of in-line skate boots. *An expert witness research report for Merchant & Gould.*
106. Hasler, E., Fisher, R., Nigg, B.M. and **Stefanyshyn, D.** (1996) Landing conditions of the heel during running. *Research report for adidas America Research and Innovation.*
107. **Stefanyshyn, D.J.** and Nigg, B.M. (1996) Point elastic surface testing. *Research report for Mondo America Inc.*
108. Lee, S., Müller, C., **Stefanyshyn, D.** and Nigg, B. (1996) Relationship between relative forefoot abduction and foot length in vitro. *Research report for Decathlon Footwear.*
109. Reinschmidt, C., O'Flynn, B., Nigg, B. and **Stefanyshyn, D.** (1996) Biomechanical testing of a new ski boot design. *Research report for Kaufman Footwear Active Sports Division.*
110. **Stefanyshyn, D.J.**, Nigg, B.M., Fisher, R. and O'Flynn, B. (1996) Influence of high heels on gait. *Research report for Schering-Plough Healthcare Products, Inc.*
111. **Stefanyshyn, D.J.** (1996) Dynamic differences in age. *Chapter in a Research report for adidas America Research and Innovation.*
112. **Stefanyshyn, D.J.** (1996) Dynamic differences in gender. *Chapter in a Research report for adidas America Research and Innovation.*
113. **Stefanyshyn, D.J.**, Nigg, B.M., Fisher, R. and O'Flynn, B. (1996) Influence of arch support on running kinematics. *Research report for adidas America Research and Innovation.*

114. Nigg, B.M., Hawes, M.R. and **Stefanyshyn, D.J.** (1996) Foot comfort. *Chapter in a Research report for adidas America Research and Innovation.*
115. **Stefanyshyn, D.J.** and Nigg, B.M. (1995) Cleated shoe friction characteristics. *Research report for adidas America Research and Innovation.*
116. **Stefanyshyn, D.J.** and Nigg, B.M. (1995) Edmonton indoor soccer centre - artificial turf testing. *Research report for Johnston Sport Architecture.*
117. Nigg, B.M., **Stefanyshyn, D.**, Reinschmidt, C. and Reinhardt, H. (1995) Third generation Malleoloc testing. *Research and development report for Bauerfeind GmbH & Co.*
118. Nigg, B.M., **Stefanyshyn, D.**, Reinschmidt, C. and Reinhardt, H. (1995) Malleoloc prototype testing - pilot study. *Research report for Bauerfeind GmbH & Co.*
119. **Stefanyshyn, D.J.** and Nigg, B.M. (1994) Frictional testing for selected playing surfaces. *Research/testing report for Mondo International.*
120. **Stefanyshyn, D.J.**, Nigg, B.M., and Kim, S. (1994) Surface testing McGill University. *Research Report for Johnston Sport Architecture.*
121. Wiley, J.P., Nigg, B.M., Estabrooks, P., and **Stefanyshyn, D.** (1994) Passive and active range of motion reduction by the MALLEOLOC ankle orthosis. Chapter in a *Research Report for Bauerfeind GmbH & Co.*
122. Nigg, B.M., Fisher, V., Hamilton, G., Nigg, C.R., Reinschmidt, C., and **Stefanyshyn, D.** (1994) Malleoloc-Prototype. *Research report for Bauerfeind GmbH & Co.*
123. Nigg, B.M., Fisher, V., Hamilton, G., Nigg, C.R., Reinschmidt, C., **Stefanyshyn, D.**, and Reinhart, H. (1994) Product development for the Malleoloc ankle orthosis. *Product development report for Bauerfeind GmbH & Co.*
124. Gerritsen, K., Nigg, B.M., de Koning, J., and **Stefanyshyn, D.** (1993) Surface properties of selected area-elastic indoor surfaces measured in two directions. *Research Report for Robbins Inc.*

FUNDING OBTAINED

2009 Natural Sciences and Engineering Research Council of Canada \$100,000

Principal Applicant – Supplementing joint stiffness during human locomotion

2009 Korea Footwear Institute \$35,000

Principal Applicant – Walking Footwear Evaluation

2009 Adidas International \$18,500

Principal Applicant – Sprint Shoe Performance

2009 Adidas International \$95,000

Principal Applicant – Performance Footwear and Apparel

2008 Adidas International \$75,000

Principal Applicant – Performance Footwear and Apparel

2008 Own the Podium – Top Secret 2010 \$21,000

Principal Applicant – Skate Blade Klap Revolution

2008 Own the Podium – Top Secret 2010 \$44,000

Principal Applicant – Elastic Energy Return Suit Development

2008 TaylorMade adidas Golf \$32,500

Principal Applicant – Control Strategies in Golf

2007 Marks Work Wearhouse \$100,000

Principal Applicant – Anti Slip Footwear

2007 Adidas International \$75,000

Principal Applicant – Performance Footwear and Apparel

2007 Korea Footwear Institute \$30,000

Principal Applicant – Taekwondo Footwear

2007 Olympic Oval High Performance Fund \$14,000

Principal Applicant – Subject Specific Alpine Ski Selection

2007 Own the Podium – Top Secret 2010 \$42,000 (Should be 64,800)

Principal Applicant – Sledge Hockey Development

2007 Own the Podium – Top Secret 2010 \$16,000

Principal Applicant – Luge Research and Development

2007 Olympic Oval High Performance Fund \$16,600

Principal Applicant – Torque Driven Mathematical Model to Predict Subject Specific Klapskate Hinge Position

2006 TaylorMade adidas Golf \$40,000

Principal Applicant – EMG and Golfer Club Preference

2006 Own the Podium – Top Secret 2010 \$35,000

Principal Applicant – The Double Push Speed Skating Technique

2006 Own the Podium – Top Secret 2010 \$25,000

Principal Applicant – Performance Apparel – Proof of Concept

2006 Hammerhead Innovations Inc. \$72,000

Principal Applicant – Development of a Bicycle Seat Supplement

2005 Canadian Sport Centre \$118,000

Principal Applicant – Data Collection Systems for High Performance Sport

2004 TaylorMade adidas Golf \$180,000 (in-kind)

Principal Applicant – Golf Swing Kinematics and Golf Club Characteristics

2004 Kolonsport Corp. \$40,000

Principal Applicant – Hiking Footwear

2004 Kolonsport Corp. - \$20,000

Principal Applicant – Energy Return in Hiking Boots

2004 National Hockey League \$25,000

Principal Applicant – The Relationship between Energy Return and Puck Speed in Composite Sticks

2003 National Hockey League \$75,000

Principal Applicant – Evaluation of Current and Proposed Hockey Stick Designs

2003 Canadian Institute of Health Research New Emerging Team \$1,515,000

Co-applicant – Gender Influences on Musculoskeletal Health Across the Lifespan

2003 Department of National Defense \$69,500

Principal Applicant – Moldable Boot Inserts

2003 Olympic Oval High Performance Fund \$1,730

Principal Applicant – The Influence of Blade Curvature on Short Track Speed Skating Performance

2002 Korean Research Foundation \$54,000

Co-principal Applicant - Plantar Fasciitis and Arch Strain

2001 International Olympic Committee \$36,750

Principal Applicant – The Influence of Klapskate Hinge Position on Long-track Speed Skating Performance

2001 University of Calgary Olympic Oval \$15,000

Principal Applicant – The Influence of Speed Skate Design on Long-track Speed Skating Performance

2001 Department of National Defense \$79,411

Co-principal Applicant – Correlation of Comfort with Newly Developed Footwear Inserts

2001 Olympic Oval Endowment Fund \$5,000

Principal Applicant – Performance Aspects of New Speed Skate Designs

2000 Olympic Oval Endowment Fund \$4,000

Principal Applicant – Lean Angle and Push-off Forces in Short Track Speed Skate Cornering

2000 Alberta Heritage Foundation for Medical Research Travel Grant \$1,350

Principal Applicant – The Relationship Between Impact Forces and Running Injuries

1999 University of Calgary Curriculum Redesign Fellowship \$5,000

Principal Applicant – Biomechanics Undergraduate Curriculum Redesign

1999 International Olympic Committee \$58,320

Principal Applicant – Relationship Between Energy Produced and Lost in Joints on Sprinting Performance

1999 University of Calgary Starter Grant \$7,260

Principal Applicant - The Mechanical Energetics of Athletic Performance

1999 Department of National Defense \$85,989

Co-principal Applicant – Comfort of Inserts

1998 Intellectual Infrastructure Partnership Program \$49,000

Principal Applicant – Video Based Analysis of Human Movement

1998 Research Excellence Envelope Award \$31,845

Principal Applicant – The Influence of Mechanical Energy Aspects on Athletic Performance

1995 University of Calgary Thesis Research Grant \$1,500

Principal Applicant – The Influence of the Metatarsal/phalangeal Joint in Athletic Activities

1995 University of Calgary Graduate Conference Travel Grant \$700

Principal Applicant – The Spring Like Nature of the Ankle Joint During Running and Sprinting

1994 Olympic Oval Endowment Fund \$5,800

Principal Applicant – Analysis of the Effect of Different Mechanical Properties of Sport Surfaces on the Adaptation of the Lower Extremities

GRADUATE STUDENTS SUPERVISED

Sean Osis	MSc Kinesiology	2008-
Eveline Graf	PhD Kinesiology	2008-
Loius Porier (Co supervise)	PhD Physics	2007-
Bill Wannop	MSc Kinesiology	2007-
Geng Luo	PhD Kinesiology	2006-
Tiffany Edgecombe	PhD Mechanical Engineering	2005-
Brady Anderson	MSc Kinesiology and Mech Eng.	2004-2007
Blayne Hettinga	PhD Kinesiology	2003-
Jay Worobets	PhD Kinesiology	2002-2008
Sang Kyoong Park	PhD Kinesiology	2002-2008
J.P. Roy	MSc Kinesiology	2001-2004
Scott van Horne	MSc Kinesiology	2001-2003
Jason Krell	MSc Kinesiology	1999-2002

GRADUATE STUDENTS – SUPERVISORY COMMITTEE

Neal Austin	MSc Kinesiology	2008-
Melissa Rabito	MSc Kinesiology	2008-
Elysia Davis	PhD Kinesiology	2008-
Hashel Al Tunajji	MSc Kinesiology	2008-2009
Anne-Marie Kietzig	PhD Engineering-University of British Columbia	2007-
Jared Fletcher	MSc Kinesiology	2007-2008
Tim Leonard	PhD Kinesiology	2006-
Derek Panchuk	PhD Kinesiology	2005-2008
James Croft	PhD Kinesiology	2003-2006
Prism Schneider	PhD Kinesiology	2003-2005
Daniel Pittman	MSc Kinesiology	2002-2004
Yukiko Toyoda	MSc Kinesiology	2001-2005
Anne Mundermann	PhD Medical Science	1999-2002
Matthew Nurse	PhD Medical Science	1999-2002
Stephen Martell	MSc Kinesiology	1999-2001
Mark Oleson	MSc Mechanical Engineering	1999-2000

GRADUATE STUDENTS – THESIS EXAMINING COMMITTEE

Marcin Pilat	PhD Computer Science	2009
Liane Azevedo	PhD Exercise Science – University of Cape Town	2009
Gillian Mara	PhD Mechanical Engineering-Loughborough	2007
James Croft	PhD Kinesiology	2006
Jasmine Beye	MSc Medical Science	2006
Brad Monteleone	PhD Medical Science	2006
Vivienne Chuter	PhD Health Sciences-University of Cape Town	2006
Regan Arendse	PhD Human Biology-University of Cape Town	2004
David Longino	MSc Medical Science	2003
Anne Gildenhuys	MSc Mechanical Engineering	2003
Ryan McComiskey	MSc Mechanical Engineering	2002
Lou Rosenfeld	MSc Mechanical Engineering	2000
Claire Davies	MSc Mechanical Engineering	1999

UNDERGRADUATE AND VISITING STUDENTS SUPERVISED

Fausto Panazolli	University of Padova, Italy	2009
Joerg Neubauer	University of Chemnitz, Germany	2008
Willem van Dijk	University of Twente, The Netherlands	2008

Wouter Visch	Haagse Hogeschool, The Netherlands	2008
Harmen van der Wal	Haagse Hogeschool, The Netherlands	2008
Felipe Carpes	Federal U of Rio Grande do Sul, Brazil	2008
Laurie Tremblay	University of Ottawa	2006
Stan Mazursky	Kinesiology, University of Calgary	2006
Bill Wannop	Kinesiology, University of Calgary	2006
Stan Mazursky	Kinesiology, University of Calgary	2005-2006
Bill Wannop	Kinesiology, University of Calgary	2005-2006
John Fairbairn	Mechanical Engineering, University of Calgary	2005
Darren Hinton	Kinesiology, University of Calgary	2005
Bastiaan Mooij	University of Twente, The Netherlands	2004-2005
Erik van den Haak	University of Twente, The Netherlands	2004-2005
John Fairbairn	Mechanical Engineering, University of Calgary	2004
Lisette Coolen	University of Twente, The Netherlands	2004
Thomas Wheeler	INSA, France	2004
Fiona van Doorn	Vrije Universiteit Amsterdam, The Netherlands	2003
Luke Savage	Kinesiology, University of Calgary	2003
Amy Barnett	Kinesiology, University of Calgary	2003
Frans van Wegen	University of Twente, The Netherlands	2002
Jay Worobets	Kinesiology, University of Calgary	2002
Erick Noriega	Kinesiology, University of Calgary	2002
Carola Henzen	The Hague University, The Netherlands	2001
Ralf Bekers	The Hague University, The Netherlands	2001
Lars Strudsholm	Mechanical Engineering, University of Calgary	2001
Josee Henckens	University of Gronigen, The Netherlands	2000
Antra Rozitis	Kinesiology, University of Calgary	2000
Gijs van Duinen	University of Twente, The Netherlands	1999
Martine Brandsma	Hague U of Prof Education, The Netherlands	1999
Melvyn Roerdink	Hague U of Prof Education, The Netherlands	1999
Lars Strudsholm	Mechanical Engineering, University of Calgary	1999
Kerim Genc	Kinesiology, University of Calgary	1999
Ingrid van der Vlist	Hague U of Prof Education, The Netherlands	1997
Richard Balk	Hague U of Prof Education, The Netherlands	1997

VISITING PROFESSORS

Dr. Yong-Jae Kim	Pukyong National University, Korea	2009
Dr. David Pearsall	McGill University, Canada	2009
Dr. Seung-Jae Kim	Hanseo University, Korea	2004
Dr. Joong-Sook Lee	Silla University, Korea	2003-2004

COURSES TAUGHT

Kinesiology 291 – Biomechanics Research Seminar 1 (10 students)

Kinesiology 293 – Biomechanics Research Seminar 2 (10 students)

Kinesiology 263 – Biomechanics I (180 students)

Muscular and mechanical analysis of human movement.

Kinesiology 363 – Biomechanics II (20 students)

Mechanics of biological materials.

Kinesiology 463 – Biomechanical Analysis of Human Motion (30 students)

An examination of advanced techniques used in biomechanical analysis.

Kinesiology 466 – Biomechanics Research Project (6 students)
Capstone course where students complete a detailed research project.

Kinesiology 503 – Advanced Biomechanical Analysis (5 students)
Practicum research course for senior students.

Medical Science 755 – Bone and Joint Health Seminar Series (15 students)

REFEREE FOR JOURNAL PAPERS

American Journal of Sports Medicine
British Journal of Sports Medicine
Clinical Biomechanics
Clinical Journal of Sport Medicine
European Journal of Sport Sciences
Journal of the American Podiatric Medical Association
Journal of Applied Biomechanics
Journal of Applied Physiology
Journal of Biomechanics
Journal of Biomechanical Engineering
Journal of Motor Behavior
Journal of Science and Medicine in Sport
Journal of Sports Engineering and Technology
Journal of Sport Sciences
Journal of Sport Science and Medicine
Medicine and Science in Sports and Exercise
Royal Society Biology Letters
Sports Biomechanics
Sports Medicine

REFEREE FOR GRANT APPLICATIONS

Arthritis Research Campaign
International Rugby Board
Natural Sciences and Engineering Research Council of Canada
National Institute of Health – Small Business Innovation and Research
UK Medical Research Council
Whitaker Foundation for Biomedical Research

EXPERT LEGAL WORK

Nike vs adidas	2007
Ondrusek vs Murphy	2002
Brown vs Breg	2002
Roberts vs Rollerblade	1997