# Curriculum Vitae Stephen Sau-Shing Cheung, Ph.D.

Citizenship: Canadian

Work Home

Canada Research Chair and Professor
Dept. of Kinesiology
Brock University
500 Glenridge Ave.
St. Catharines, ON, L2S-3A1
Tel. (905) 688-5550x5662

Fax. (905) 688-8364 E-mail: scheung@brocku.ca 19 Milburn Drive Fonthill, Ontario LOS-1E4

E-mail: thermal.doc@gmail.com

## **Adjunct Appointments**

Faculty of Graduate Studies, Dalhousie University (2007 – 2010)

Faculty of Physical Education & Health, University of Alberta (2011 – present)

School of Graduate Studies, University of Toronto (2012 – present)

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# 1. Areas of Expertise

Environmental physiology, human temperature regulation, heat and cold physiology, hyperthermia, hypothermia, cognitive ergonomics, body fluid balance, liquid cooling garments, protective clothing, breath-holding, cardiovascular physiology, exercise.

## 2. Education

Degree	Date	University
Post-doctoral Fellowship	1998	University of Aberdeen: Department of Biomedical Sciences
Ph.D.	1994-1998	University of Toronto: Department of Exercise Science, School of Community Health
Diploma (Honours)	1994	International Space University: Department of Space Life Sciences
M.Sc.	1991-1994	Simon Fraser University: School of Kinesiology
B.Sc. (Combined Honours)	1986-1990	University of British Columbia: Department of Oceanography/Zoology (1 <sup>st</sup> Class Standing)

## 3. Dissertation or Thesis

Ph.D.

Specialisation: Environmental/exercise physiology, temperature regulation.

Advisor: Tom M. McLellan, Ph.D.

Thesis: The thermophysiology of uncompensable heat stress: influence of hydration status, fluid replacement, physical training, aerobic fitness, and heat acclimation.

International Space University (Honours Diploma)

Specialisation: Space life sciences Advisor: Oleg A. Atkov, M.D.

Design Project: Solar system exploration design project.

M.Sc.

Specialisation: Environmental physiology, temperature regulation.

Advisor: Igor B. Mekjavic, Ph.D.

Thesis: Dose-dependent effects of sub-anesthetic levels of nitrous oxide on thermal

balance in humans.

B.Sc. (Combined Honours)

Specialisation: Biological oceanography.

Advisor: Paul J. Harrison, Ph.D.

Thesis: Tidal effects on phytoplankton productivity in a coastal estuary.

## 4. Publications

Books	3
Book Chapters	4
Peer-reviewed journal articles	93
Commentaries	8
Technical Reports	11
Peer-reviewed conference	98
proceedings	
Invited Presentations	18

## 5. Books

- 1. Cheung, S.S. and M.D. Zabala. Cycling Science. Human Kinetics, Champaign, USA. ISBN: 978-1450497329, 2017.
- 2. Allen, H. and **S.S. Cheung**. Cutting-Edge Cycling. Human Kinetics, Champaign, USA. ISBN: 978-0-73609-109-1, 2012. (Translated into German ISBN: 978-3-936376-93-7 2013)
- 3. Cheung, S.S. Advanced Environmental Exercise Physiology. Human Kinetics, Champaign, USA. ISBN: 978-0-73607-468-1, 2010.

# 6. Book Chapters

- Cheung, S.S. and C.J. Tyler. Thermal Stress. In: Mayo Clinic: Medicine in Challenging Environments for Apple iOS (Version 7.1). Stepanek, J., R. Johnson, and D. Cocco (Eds). Retrieved from <a href="http://www.viacuro.com/MICE/">http://www.viacuro.com/MICE/</a>. 2014.
- 2. **Cheung, S.S.** and C.J. Tyler. Hydration. In: Mayo Clinic: Medicine in Challenging Environments for Apple iOS (Version 7.1). Stepanek, J., R. Johnson, and D. Cocco (Eds). Retrieved from <a href="http://www.viacuro.com/MICE/">http://www.viacuro.com/MICE/</a>. 2014.
- 3. Cheung, S.S. Two-way interactions between mental and physical stressors and their role in fatigue. In: F.E. Marino (Ed.) The Regulation of Fatigue in Exercise. Nova Science Publishers, Inc.

- Hauppauge, New York. ISBN: 978-1-61209-334-5. pp. 27-40, 2011.
- 4. Flouris, A.D.\* and **S.S. Cheung.** Reviewing the functional architecture of the human thermoregulatory system. In: Austin B. Cisneros and Bryan L. Goins (Eds.), Body Temperature Regulation. Nova Science Publishers, Inc. Hauppauge, New York, ISBN: 978-1-60741-282-3. pp. 25-64, 2009.

# 7. Articles published

- \* Graduate student or post-doctoral fellow authors
- † Undergraduate student authors
  - 1. Farra, S.D.\*, **S.S. Cheung,** S.G. Thomas, I. Jacobs. Rate dependent influence of arterial desaturation on self-selected exercise intensity during cycling. *PLOS One*. 12(3):e0171119, doi: 10.1371/journal.pone.0171119, 2017.
  - 2. Mallette, M.M.\*, G.J. Hodges\*, G.W. McGarr\*, D.A. Gabriel, and S.S. Cheung. Spectral analysis of reflex cutaneous vasodilatation during passive heat stress. *Microvasc. Res.* 111(5):42-48, 2017.
  - 3. Wallace, P.J.\*, B.J. McKinlay, N.A. Coletta\*, J.I. Vlaar\*, M.J. Taber, P.M. Wilson, and **S.S. Cheung**. Effects of motivational self-talk on endurance and cognitive performance in the heat. *Med. Sci. Sports Exerc.* 49(1):191-199, 2017.
  - 4. Tyler, C.J., T. Reeve, G.J. Hodges\*, and **S.S. Cheung**. The effects of heat adaptation on physiology, perception, and exercise performance in the heat: a meta-analysis. *Sports Med*. 46(11):1699-1724, 2016.
  - 5. Taber, M.J.\*, G.L. Hartley\*, G.W. McGarr\*, D. Zaharieva†, F.A. Basset, Z. Hynes, F. Haman, B. Pinet, M.B. DuCharme, and S.S. Cheung. Cognitive performance during a 24-hour cold exposure survival simulation. *Biomed. Res. Int.* 8130731, 2016.
  - 6. **Cheung, S.S.**, J.K.W. Lee, and J. Oksa. Thermal stress, human performance and physical employment standards. *Appl. Physiol. Nutr. Metabol.* 41(6 (Suppl. 2):S148-S164, 2016.
  - 7. Hartley, G.L.\*, C.L. Watson\*, P.N. Ainslie, C.D. Tokuno, M.J. Greenway, David A. Gabriel, D.D. O'Leary, and **S.S. Cheung**. Corticospinal excitability is associated with hypocapnia but not changes in cerebral blood flow. *J. Physiol.* (London) 594:3423-3437, 2016.
  - 8. Mallette, M.M.\*, G.J. Hodges\*, G.W. McGarr\*, D.A. Gabriel, and S.S. Cheung. Investigating the roles of core and local temperature on forearm skin blood flow. *Microvasc. Res.* 106:88-95, 2016.

- 9. Haman, F., O. Mantha, **S.S. Cheung**, M. DuCharme, M.J. Taber\*, D. Blondin, G.W. McGarr\*, G.L. Hartley\*, Z. Hynes, and F. Basset. Oxidative fuel selection and shivering thermogenesis during a 12 and 24h cold survival simulation. *J. Appl. Physiol.* 120:640-648, 2016.
- 10. Hodges, G.J.\*, G.W. McGarr\*, M.M. Mallette\*, A.T. Del Pozzi, and **S.S. Cheung**. The contribution of sensory nerves to the onset threshold for cutaneous vasodilatation during gradual local skin heating of the forearm and leg. *Microvasc. Res.* 105:1-6, 2016.
- 11. Zhao, J., L. Lai, **S.S. Cheung**, S. Cui, N. An, W. Feng, and S. Lorenzo. Hot environments decrease exercise capacity and elevate multiple neurotransmitters. *Life Sci.* 141:74-80, 2015.
- 12. Hodges, G.J.\*, A.T. Del Pozzi, G.W. McGarr\*, M.M. Mallette\*, and **S.S. Cheung**. The contribution of sensory nerves to cutaneous vasodilatation of the forearm and leg to local skin heating. *Eur. J. Appl. Physiol.* 115:2091-2098, 2015.
- 13. Wallace, P.J.\*, A.T. Masbou<sup>†</sup>, S.R. Petersen, and **S.S. Cheung**. The effects of cranial cooling during recovery on subsequent uncompensable heat stress tolerance. *Appl. Physiol. Nutr. Metabol.* 40(8):811-816, 2015.
- 14. McGarr, G.W.\*, G.J. Hodges\*, and **S.S. Cheung**. An adjustable stabilizing device for imaging the cutaneous microcirculation with Sidestream Dark Field imaging. *Microvasc. Res.* 100:1-3, 2015.
- 15. Cheung, S.S., G.W. McGarr\*, M.M. Mallette\*, P.J. Wallace\*, C.L. Watson\*, I.M. Kim†, and M.J. Greenway. The separate and combined effects of dehydration and thirst on exercise performance in the heat. Scand. J. Med. Sci. Sport 25(Suppl. 1): 104-111, 2015.
- 16. Tyler, C.J., T. Reeves, and **S.S. Cheung**. Cold-induced vasodilation during single digit immersion in 0°C and 8°C water in men and women. *PLOS-One* 10(4):e0122592, doi: 10.1371/journal.pone.0122592, 2015.
- 17. **Cheung, S.S.** Responses of the hands and feet to cold exposure. *Temperature* 2(1):105-120, 2015.
- 18. Montgomery, R.E.\*, G.L. Hartley\*, C.J. Tyler, and **S.S. Cheung**. Effect of segmental, localized lower limb cooling on dynamic balance. *Med. Sci. Sports Exerc.* 47(1):66-73, 2015.
- 19. Tyler, C.J., C. Sunderland, and **S.S. Cheung**. The effect of cooling prior to and during exercise on exercise performance and capacity in the heat: a meta-analysis. *Br. J. Sports Med.* 49(1):7-13, 2015.

20. Morrison, S.A.\*, **S.S. Cheung**, and J.D. Cotter. Importance of airflow for physiologic and ergogenic effects of precooling. *J. Athl. Train.* 49(5):632-639, 2014.

- 21. **Cheung, S.S.**, N.E. Mutanen, H.M. Karinen, A.S. Koponen, H. Kyrolainen, H.O. Tikkanen, and J.E. Peltonen. Ventilatory chemosensitivity, cerebral and muscle oxygenation, and total hemoglobin mass before and after a 72-day Mt. Everest expedition. *High Alt. Med. Biol.* 15(3):331-340, 2014.
- 22. Morrison, S.A., **S.S. Cheung**, and J.D. Cotter. Bovine colostrum, training status and gastrointestinal permeability during exercise in the heat: A placebo-controlled double-blind study. *Appl. Physiol. Nutr. Metab.* 39(9):1070-1082, 2014.
- 23. Morrison, S.A.\*, P.N. Ainslie, R.A.I. Lucas, **S.S. Cheung**, and J.D. Cotter. Compression garments and aerobic fitness do not alter cerebrovascular responses to orthostatic stress after passive heat. *Scand. J. Med. Sci. Sports* 24(2):291-300, 2014.
- 24. Gagnon, D.D., H. Rintamäki, S.S. Gagnon, J. Oksa, K. Porvari, S.S. Cheung, K-H. Herzig, and H. Kyröläinen. Fuel selection during short-term submaximal treadmill exercise in the cold is not affected by pre-exercise low-intensity shivering. *Appl. Physiol. Nutr. Metab.* 39(3):282-291, 2014.
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- 26. Hasegawa, H. and **S.S. Cheung**. Hyperthermia effects on brain function and exercise capacity. *J. Phys. Fitness Sports Med.* 2: 429-438, 2013.
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- 29. Carrillo, A.E.\*, **S.S. Cheung**, and A.D. Flouris\*. Autonomic nervous system modulation during accidental syncope induced by heat and orthostatic stress. *Aviat. Space Environ. Med.* 84(7):722-725, 2013.
- 30. Morrison, S.A.\*, **S.S. Cheung**, R.D. Hurst, and J.D. Cotter. Cognitive function and blood-brain barrier permeability during

- exercise in the heat: effect of fitness and bovine colostrum supplementation. J. Thermal Biol. 38(7):374-383, 2013.
- 31. Gagnon, D.D., H. Rintamäki, S. Gagnon, **S.S. Cheung**, K-H. Herzig, K. Porvari, and H. Kyröläinen. Cold exposure enhances fat utilization but not non-esterified fatty acids, glycerol or catecholamines availability during submaximal walking and running. *Frontiers Physiol*. 4:99 doi: 10.3389/fphys.2013.00099, 2013.
- 32. De Pauw, K., B. Roelands, **S.S. Cheung**, B. de Geus, G. Rietjens, and R. Meeusen. Guidelines to classify subject groups in sport science research. *Int. J. Sports Physiol. Performance* 8(2):111-122, 2013.
- 33. Hartley, G.L.\* and **S.S. Cheung**. Freely chosen cadence during a covert manipulation of ambient temperature. *Motor Control* 17(1):34-47, 2013.
- 34. Tonoli, C., E. Heyman, B. Roelands, L. Buyse, **S.S. Cheung**, S. Berthoin, and R. Meeusen. Effects of different types of acute and chronic training exercise on glycaemic control in Type 1 Diabetes A meta-analysis. *Sports Med.* 42(12):1059-1080, 2012.
- 35. Daanen, H.A.M., J. Koedam, and **S.S. Cheung**. Trainability of cold-induced vasodilatation in the fingers and toes. *Eur. J. Appl. Physiol.* 112(7):2595-2601, 2012.
- 36. Hartley, G.L.\*, A.D. Flouris, M.J. Plyley, and **S.S. Cheung**. The effect of a covert manipulation of ambient temperature on heat storage and voluntary exercise intensity. *Physiol. Behav*. 105(5):1194-1201, 2012.
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- 39. Taber, M.J.\*, N.F. Dies\*, and **S.S. Cheung**. The effect of transportation suit induced heat stress on helicopter underwater escape preparation and task performance. *Appl. Ergo.* 42(6):883-889, 2011.
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- 41. Flouris, A.D.\* and **S.S. Cheung**. Thermal basis of finger blood flow adaptations during abrupt perturbations in thermal homeostasis. *Microcirculation* 18(1):56-62, 2011.

- 42. Reynolds, L.F.\*, C. Short, D.A. Westwood, and **S.S. Cheung**. Head pre-cooling improves symptoms of heat-sensitive Multiple Sclerosis patients. *Can. J. Neurol. Sci.* 38(1):106-111, 2011.
- 43. Grantham, J. S.S. Cheung, P. Connes, M.A. Febbraio, N. Gaoua, J. Gonzalez-Alonso, O. Hue, J.M. Johnson, R.J. Maughan, R. Meeusen, L. Nybo, S. Racinais, B. Saltin, S.M. Shirreffs, and J. Dvorak. Current knowledge on playing football in hot environments FIFA Position Statement. Scand. J. Med. Science Sports 20(Suppl. 3):161-167, 2010.
- 44. **Cheung, S.S.** Interconnections between thermal perception and exercise capacity in the heat. *Scand. J. Med. Science Sports* 20(Suppl. 3):53-59, 2010.
- 45. Cheung, S.S., T.M. McLellan, and S.R. Petersen. Physiological strain and countermeasures with firefighting. Scand. J. Med. Science Sports 20(Suppl. 3):103-116, 2010.
- 46. Flouris, A.D.\* and **S.S. Cheung**. Validity of tympanic and exhaled breath temperature for core temperature measurement. *Physiol. Meas.* 31(5):35-42, 2010.
- 47. Flouris, A.D.\* and **S.S. Cheung**. Thermometry and calorimetry assessment of sweat response during exercise in the heat. *Eur. J. Appl. Physiol.* 108(5):905-911, 2010.
- 48. Mak, L., A. Kuczora, M.B. DuCharme, B. Farnworth, J. Boone, R. Brown, K-A Evely, F.A. Basset, S. MacKinnon, and **S.S. Cheung**. Experimental study and modelling of thermal protection in liferaft using a thermal manikin and human subjects. *Proceedings of 28<sup>th</sup> International Conference on Ocean, Offshore and Arctic Engineering*, 2009.
- 49. Flouris, A.D.\* and **S.S. Cheung**. Influence of thermal balance on cold-induced vasodilation. *J. Appl. Physiol.* 106:1264-1271, 2009.
- 50. Flouris, A.D.\* and **S.S. Cheung**. Human conscious response to thermal input is adjusted to changes in mean body temperature. *Br. J. Sports Med.* 43:199-203, 2009.
- 51. Morrison, S.A.\*, G.G. Sleivert, J.P. Neary, and **S.S. Cheung**. Prefrontal cortex oxygenation is preserved and does not contribute to impaired neuromuscular activation during passive hyperthermia. *Appl. Physiol. Nutr. Metab.* 34:66-74, 2009.
- 52. Carrillo, A.E.\*, R.J.L. Murphy, and **S.S. Cheung**. Vitamin C supplementation and salivary immune function following exercise-heat stress. *Int. J. Sports Physiol. Perform.* 3:516-530, 2008.
- 53. Flouris, A.D.\*, D.A. Westwood, I.B. Mekjavic, and **S.S. Cheung**. Effect of body temperature on cold induced vasodilation. *Eur. J. Appl. Physiol.* 104:491-499, 2008.

54. Cheung, S.S. Neuromuscular responses to exercise heat stress. *Med. Sport Sci.* 53:39-60, 2008.

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- 56. Mekjavic, I.B., U. Dobnikar, S.N. Kounalakis, B. Musizza, and S.S. Cheung. The trainability and contralateral response of cold-induced vasodilatation in the fingers following repeated cold exposure. *Eur. J. Appl. Physiol.* 104:193-199, 2008.
- 57. **Cheung, S.S.**, L.F. Reynolds\*, M.A.B. Macdonald†, C.L. Tweedie†, R.L. Urquhart\*, and D.A. Westwood. Effects of local and core body temperature on grip force modulation during movement-induced load force fluctuations. *Eur. J. Appl. Physiol.* 103:59-69, 2008.
- 58. Reynolds, L.F.\*, I.B. Mekjavic, and **S.S. Cheung**. Cold-induced vasodilatation in the foot is not homogenous or trainable over repeated cold exposure. *Eur. J. Appl. Physiol.* 102:73-78, 2007.
- 59. **Cheung, S.S.** Neuropsychological determinants of exercise tolerance in the heat. *Prog. Brain Res.* 162:45-60, 2007.
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- 64. Cheung, S.S., D.A. Westwood, and M.K. Knox†. Mild body cooling impairs attention via distraction from skin cooling. *Ergonomics*. 50:275-288, 2007.
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- body heat content on hand function during prolonged cold exposures. J. Appl. Physiol. 101:802-808, 2006.
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- 71. Wright, H.E.\* and **S.S. Cheung**. Cranial-neck and inhalation rewarming failed to improve recovery from mild hypothermia. *Aviat. Space Environ. Med.* 77:398-403, 2006.
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- 75. **Cheung, S.S.** and A.M. Robinson<sup>†</sup>. Wingate sprinting performance in temperate environments after upper body pre-cooling. *J. Sport Sci.* 22:605-612, 2004.
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- 84. **Cheung, S.S.**, T.M. McLellan, and S. Tenaglia. The thermophysiology of uncompensable heat stress: physiological manipulations and individual characteristics. *Sports Med.* 29: 329-359, 2000.
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- 88. Cheung, S.S. and T.M. McLellan. Influence of hydration status and short-term aerobic training on tolerance during uncompensable heat stress. Eur. J. Appl. Physiol. 78: 50-58, 1998.
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#### 8. Commentaries

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- 97. McLellan, T.M., J.I. Pope, J.B. Cain, and S.S. Cheung. Effects of metabolic rate and ambient vapour pressure on heat strain in protective clothing. American College of Sports Medicine Meeting, Cincinnati, U.S.A., 1996.
- 98. **Cheung, S.S.** and I.B. Mekjavic. Human temperature regulation at subanesthetic levels of nitrous oxide-induced narcosis. In: *International Conference for Environmental Ergonomics Proceedings*, Montebello, Canada, 1994.

## 12. Invited Presentations

- 1. Cheung, S.S. Gord Sleivert Memorial Lecture in Sport Science (Adapting to training and competing in the heat). Canadian Society for Exercise Physiology. Winnipeg, Canada, October 2017.
- 2. Cheung, S.S. Keep cool and work on: microclimate cooling. Canadian Society for Exercise Physiology. Winnipeg, Canada, October 2017.
- 3. **Cheung, S.S.** Adapting to training and competing in the heat. *Finnish Society for Sport Science*. Tampere, Finland, March 2017.
- 4. **Cheung, S.S.** Power analysis and data analytics for cycling training. *Finnish Society for Sport Science*. Tampere, Finland, March 2017.
- 5. Cheung, S.S. Adapting to training and competing in the heat. Sports Innovation Summit. Toronto, Canada, October 2015.
- 6. Cheung, S.S. Physical capacity under heat stress in the workplace. Canadian Society for Exercise Physiology conference. Hamilton, Canada, October 2015.
- 7. **Cheung, S.S.**, J.K.W. Lee, and J. Oksa. Thermal stress and physical employment standards. 2<sup>nd</sup> International Conference on Physical Employment Standards. Canmore, August 2015.
- 8. **Cheung, S.S.** Is neuromuscular function affected by heat stress and how does this relate to exercise performance? *Institut National du Sport, de l'Expertise et de la Performance (INSEP)*. Paris, France, June 2015.
- 9. **Cheung, S.S.** Environmental influences on complex skills performance. *International Association of Safety and Survival Trainers*. Halifax, Canada, October 2014.
- 10. **Cheung, S.S.** Heat stress: physiology, perception and performance. *World Congress on Cycling Science*. Leeds, United Kingdom, July 2014.

- 11. **Cheung, S.S.**, G. Havenith, C. Foster, and H.A.M. Daanen. Pacing in the heat. *Vrije Universiteit Amsterdam*. Amsterdam, The Netherlands, June 2014.
- 12. **Cheung, S.S.** Exercise in protective clothing a design challenge. *Kobe Design University*. Kobe, Japan, November 2012.
- 13. Cheung, S.S. Hydration strategies for optimal performance.

  Perspectives in Exercise, Health & Fitness (Canadian Society for Exercise Physiology). Kananaskis, Canada, November 2012.
- 14. Cheung, S.S. Keeping cool and performing in the heat.

  Perspectives in Exercise, Health & Fitness (Canadian Society for Exercise Physiology). Kananaskis, Canada, November 2012.
- 15. Cheung, S.S. Exercise Capacity in the Heat. Intensive Program on Sports Performance: a Lifetime Challenge (IP-SPALC). Rome, Italy, February 2012.
- 16. **Cheung, S.S.** Thermal perception and exercise capacity in the heat. *International Conference on Environmental Ergonomics*. Nafplio, Greece, July 2011.
- 17. **Cheung, S.S.** Interconnections between psychological and physiological factors during exercise-heat stress. *Exercise in Hot Environments: from Basic Concepts to Field Applications*. ASPETAR, Doha, Qatar, November 2009.
- 18. Cheung, S.S. Thermal stress effects and countermeasures with protective clothing. Exercise in Hot Environments: from Basic Concepts to Field Applications. ASPETAR, Doha, Qatar, November 2009.
- 19. **Cheung, S.S.** Neuromuscular function during heat stress. The Future of Fatigue in Exercise An International Symposium on the Limits to Exercise Performance. Charles Sturt University, Bathurst, Australia, July 2009.
- 20. Cheung, S.S. "Adventures in hypothesis testing: fun can be work but work can be fun!" *Mapping New Knowledges, Brock University*. May 2009.
- 21. Cheung, S.S. Fatigue with protective clothing: integration of challenges and future directions. Canadian Society for Exercise Physiology conference. Banff, Canada, 2008.
- 22. Cheung, S.S. Into the deep: challenges in marine survival. Brock University James Gibson Library Faculty Seminar Series.
  November 25, 2008.
- 23. **Cheung, S.S.** The effects of core & superficial temperature decrements on cognitive functioning. *SafetyNet Conference*. St. John's, NL, 2006.

24. **Cheung, S.S.** Voluntary fatigue during hyperthermia – mechanisms and insights. *Canadian Society for Exercise Physiology conference*. Gatineau, Canada, 2005.

25. **Cheung, S.S.** Teaching exercise physiology: an engineering design approach. *Canadian Society for Exercise Physiology conference*. Saskatoon, Canada, 2004.

# 13. Current Funding

Title	Agency	Principals	Dates	\$
Analyzing pedaling dynamics to	NSERC Engage	S.S. Cheung	2016	\$23,100
improve cycling performance				
Personal cooling systems for ultra-	Jannatec	S.S. Cheung	2016	\$191,540
deep mining	Technologies			
Pressure sore risk management in	NSERC-CIHR	B. Falk and S.S.	2014-2017	\$585,246
children with Cerebral Palsy: local	CHRP	Cheung (co-PI)		
and whole body thermoregulation				
strategies, material interface and				
care protocols				
Environmental Ergonomics	Canada Research	S.S. Cheung	2012-2017	\$500,000
	Chair (Tier 2)			
Separate and combined effects of	NSERC Discovery	S.S. Cheung	2012-2017	\$200,000
temperature and oxygen on	(227912-2012)			
neuromuscular function				

# 14. Funding History

Title	Agency	Principals	Dates	\$
Modeling of water vapour transport	NSERC Engage	S.S. Cheung	2014	\$21,000
across clothing layers during	Plus			
exercise in a hot environment				
Thermal characteristics of female	Pearl iZUMi	S.S. Cheung	2014	\$24,100
cycling clothing across a range of	(contract)			(US)
environmental conditions				
Integrated environmental	Canada Foundation	S.S. Cheung	2012-2013	\$249,518
physiology tools for transpecies	for Innovation			
and field research	(Leaders			
	Opportunity Fund)			
Environmental Ergonomics	Canada Research	S.S. Cheung	2007-2012	\$500,000
	Chair (Tier 2)			
Central and peripheral thermal	NSERC Discovery	S.S. Cheung	2007-2012	\$100,000
influences on neuromuscular	(227912-2007)			
function				
Developing a model for cycling	Pearl iZUMi	S.S. Cheung	2012-2013	\$32,000
clothing thermal performance				
Post-doctoral scholarship funding	Ministry of	M. Taber	2010-2013	\$100,000
	Research &			
	Innovation			
Post-doctoral scholarship funding	MITACS Elevate	G.A. Selkirk	2010-2012	\$100,000
Modeling of water vapour transport	NSERC Engage	S.S. Cheung	2010-2011	\$25,000
across clothing layers during				
exercise in cold environments				

Thermal Requirements for	Public Works &	S.S. Cheung	2009-2012	\$97,500
Surviving a Mass Rescue Incident	Government			
in the Arctic	Services Canada			
Physiological and psychological	WSIB Ontario	S.S. Cheung	2010-2011	\$59,900
strain of firefighters during	"Bridging the Gap"			
emergency response scenarios:				
field validation of the Toronto Heat				
Study				
The effects of ambient temperature	Brock University	S.S. Cheung	2010	\$3,500
during exercise on glucose	Advancement Fund			
dynamics in Type 1 diabetics				
Comparison of high intensity	Brock International	S.S. Cheung	2008	\$4,000
versus aerobic training on	Collaboration			
cardiovascular responses to				
simulated microgravity and				
orthostatic stress				
Thermal Physiology Research	Canada Foundation	S.S. Cheung	2007	\$208,911
Facility	for Innovation –			
	Leaders			
	Opportunity Fund			
Laser-Doppler blood flow monitor	NSERC RTI	S.S. Cheung	2007	\$42,500
for measuring blood flow				
responses to thermal stress				
Thermal Protection in Liferafts:	New Search and	S. MacKinnon,	2006-2009	\$1.6M
Assessment of Occupant Heat	Rescue Initiatives	L. Mak		
Balance and Development of	Fund	(Memorial)		
Performance Criteria.				
Head and neck pre-cooling as a	Dalhousie	S.S. Cheung	2006-2007	\$5,000
therapeutic tool for individuals	University Faculty			
with heat-intolerant Multiple	of Health			
Sclerosis	Professions	G G G	2002 2004	<b>#10.000</b>
The effects of hyperthermia on	Nova Scotia Health	S.S. Cheung	2003-2004	\$10,000
vigilance and spatial attention	Research			
	Foundation –			
T 111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Development	a a a	2002 2007	Φος 000
Temperature and Hydration Effects	NSERC - Group	S.S. Cheung,	2002-2007	\$96,000
on Neuromuscular Function	Adland's Commits	G.G. Sleivert	2002 2004	¢40,400
An Anthropometric Survey and	Atlantic Canada Petroleum Institute	J.W. Kozey, J.	2002-2004	\$49,400
Human Factors study of Offshore	Petroleum Institute	McCabe,		
Workers for application to		S.S. Cheung, C.J. Brooks		
Emergency Survival Suits  Marine and Offshore Health and	Canadian Alliance		2001-2005	\$121.092
	for Health	S.S. Cheung, M.D. White	2001-2003	\$121,983
Safety: Influence of Thermal Stress on Cognitive/Physical Ergonomics	Research	WI.D. WIIILE		
Marine and Offshore Health and	Canadian Alliance	M.D. White, S.S.	2001-2005	\$474,539
Safety: Surface Exposure to Cold	for Health	Cheung, D.	2001-2003	ψ+14,339
in the North Atlantic	Research	Behm		
Marine and Offshore Health and	Canadian Alliance	M.D. White, D.	2001-2005	\$362,980
Safety: Work in Cold, Deep-Sea	for Health	Behm, <b>S.S.</b>	2001-2003	ψ302,700
Conditions	Research	Cheung		
Breath-hold Capacity in the	Natural Resources	C.J. Brooks	01/2000 -	\$15,000
Offshore Oil Population	Canada Contract	C.J. DIOOKS	05/2000	Ψ15,000
Localized versus General	Faculty of Health	S.S. Cheung	2001	\$5000
Rewarming from Hypothermia	Professions,	5.5. Cheung	2001	Ψ5000
1.5 warming from Hypotherima	Dalhousie			
	Daniousie			

	University			
Infrastructure for Environmental	Canada Foundation	S.S. Cheung	09/1999 –	100,000
Physiology and Ergonomics	for Innovation:		03/2002	
Research	New Opportunities			
The Thermophysiology of	Department of	S.S. Cheung	09/1994 -	\$50,000/
Uncompensable Heat Stress	National Defence		12/1997	у
	Contract			

# 15. Professional Memberships

Chair, Executive Member, International Society for Environmental Ergonomics (2007 – present)

European College of Sports Science (2009 – 2011).

Aerospace Medical Association (2002 – 2009).

American College of Sports Medicine (1997 - 2007).

Canadian Society of Exercise Physiology (1996 - 2012).

Canadian Alumni of the International Space University (1994 - present).

Canadian Foundation for the International Space University (1996 - 1997).

The Planetary Society (1994 - 1995).

# 16. Supervisory History

#### M.Sc. unless noted.

Name	Project	Year of	Notes
		Degree	
G. Hodges	Skin blood flow and	2014-	Project funded by CIHR-NSERC
	thermoregulation in children	present	CHRP
	with Cerebral Palsy		
M. Taber	Effects of prolonged cold	2010-	Project funded by Transport Canada
(Post-doc)	exposure on physiological and	2013	and Ministry of Research & Innovation.
	cognitive function		
G. Selkirk	Physiological and psychological	2010-	Project funded by WSIB-Ontario and
(Post-doc)	strain of firefighters during	2012	MITACS.
	emergency response scenarios:		
	field validation of the Toronto		
	Heat Study		
G. Hartley	Neuromuscular function and	2010-	Ontario Graduate Scholarship winner,
( <b>Ph.D.</b> )	thermal stress	present	2012
			Graduate award winner, American
			College of Sports Medicine
			(Environmental Physiology Interest
			Group) 2010

G. McGarr	Cardiovascular control with	2009-	Medical leave 09/12 to 09/13
( <b>Ph.D.</b> )	thermal and hypoxic stress	present	
M. Mallette	Motor unit activation under	2015 -	
(Ph.D.)	environmental stress	present	
A. Flouris	Central and peripheral thermal	2004-	Won NSERC PGS-D 2005-2008.
(Ph.D.)	inputs into thermoregulation.	2008	Won Canadian Space Agency doctoral funding 2005-2008. Won International Space University scholarship 2005. Won NSERC PDF 2008.
S. Ferguson	Hyperoxia effects on exercise	2015 -	
	performance in the cold	present	
N. Coletta	Effects of passive hyperthermia on isometric and isokinetic muscle activation	2014- present	Winner OGS 2014
T.	Heart rate variability in children	2014-	
Tharmaratnam	during heat stress	present	
P. Wallace	Effects of mental skills training on exercise tolerance in the heat	2013- 2015	Winner of Brock's "First Year TA" award 2014; Winner Jack Miller Research Excellence award 2015
M. Mallette	Central vs peripheral control of	2013-	Winner OGS 2014, winner "Top
	skin blood flow	2015	Student Poster" ICEE 2015
C. Watson	Cognitive performance effects of	2011-	Medical leave 03/13 to 01/14
	cerebral blood flow perturbations and heat stress	2015	
C. van Nijen	Separate and combined effects of hydration and thirst on exercise capacity in the heat	2013	Visiting M.Sc. student from Vrije Universiteit Amsterdam, the Netherlands
I. Broekhuijzen	Developing a thermal model for cycling clothing	2012	Visiting M.Sc. student from Vrije Universiteit Amsterdam, the Netherlands
T. Zwaan	Developing a thermal model for cycling clothing	2012	Visiting M.Sc. student from Vrije Universiteit Amsterdam, the Netherlands
R. Montgomery	Effects of lower limb temperature on balance and force control	2012	
G. Hartley	Role of environmental stressors on self-paced exercise	2010	Winner American College of Sports Medicine's Environmental Physiology Interest Group's Graduate Student (M.Sc.) Research Award, 2010.
M. Smith	Effects of environmental temperature on post-exercise glucose dynamics in Type 1 diabetes	2011	Won CIHR Banting and Best graduate scholarship, 2009.
N. Dies	Effects of the menstrual cycle and oral contraceptives on shivering and sweating thresholds	2009	NSERC PGS-M 2007-2009
S. Kilburn	Reproducibility of an isometric self-paced contraction	2009	
L. Reynolds	Effects of head cooling on exercise capacity in MS individuals	2007	Research Associate: Outcomes Research Group, Cleveland, USA.
A. Carrillo	Effects of vitamin C	2006	Won Doctoral scholarship in Nutrition

	supplementation on immune function following exercise in the heat		at Purdue University (2006 – present)
L. van Dieren	The effect of local muscle temperature on muscle oxygenation measured with NIRS	2004	Visiting research student (M.Sc. Candidate) from Free University of Amsterdam.
M. Thomas	Central versus Peripheral Control of Voluntary Muscle Activation During Passive Hyperthermia	2005	Won NSERC PGS-A Scholarship beginning May 2004. Won NSERC PGS-D 2005-2008.
J. Payne	Effects of core and peripheral cooling on navigational ability	2005	
H.E. Wright	Comparison of cranial, inhalation, and general rewarming from hypothermia	2004	Won NSERC PGS-B Scholarship beginning Fall 2004. Doctoral student York University.
M.X. Richardson	Event related potential analysis of a continuous performance task during whole body cooling.	2002	Doctoral student in Sweden
L.J. Thornley	The influence of cooling during recovery on intermittent sprint exercise in a temperate environment.	2002	Recipient of Common-wealth graduate scholarship specifically to work under my supervision.
B. Miles	The perception of alcohol usage among recreational boaters, safety officers, and enforcement officers.	2001	

# **Graduate Thesis Committees**

Name	Project	Role	Degree	Department	Institution
S. Farra	Effects of environmental	Supervisory	Ph.D.	Faculty of	University of
	stressors on voluntary	Committee	(2010-	Physical	Toronto,
	exercise pacing		2016)	Education &	Canada
				Health	
H. Sharif	Cardiac changes with spinal	Supervisory	Ph.D.	Faculty of	Brock
	cord injury	Committee	(2012-	Applied	University,
			2016)	Health	Canada
				Sciences	
S. Morrison	Cardiovascular limitations	Supervisory	Ph.D.	School of	University of
	during exercise in the heat:	Committee	(2004 –	Physical	Otago, New
	effects of endotoxemia,		2008)	Education	Zealand
	training, and hydration				
C. Geurts	Manual function with	Supervisory	Ph.D.	Faculty of	University of
	hypothermia and cold	Committee	(2001-	Kinesiology	New
	adaptation in outdoor		2005)		Brunswick
	workers				
M. Scarlett	The effects of head cooling	Supervisory	M.Sc.	Faculty of	University of
	during recovery on	Committee	(2010-	Physical	Alberta
	firefighter performance		2013)	Education &	
				Recreation	
D. Steeves	The relationship of aerobic	Supervisory	M.Sc.	School of	Dalhousie
	power to anaerobic	Committee	(2003-	Health &	University
	performance in hockey		2005)	Human	
	players			Performance	
S. Morrison	Effects of hyperthermia on	Supervisory	M.Sc.	Faculty of	University of

motor unit activation in	Committee	(2001-	Kinesiology	New
trained and untrained males		2003)		Brunswick

# Graduate External Examiner

	Drainat Examiner	Dogras	Institution
Name	Project	Degree	Institution
D. Girard	Neuromuscular mechanisms contributing to	Ph.D.	Charles Sturt University,
	self-reported post-treatment cancer fatigue and	(2016)	Australia
D. I	the effects of resistance training	DL D	Dealin Hairranita
B. Larsen	Simulated Self-Paced Wildfire Suppression	Ph.D.	Deakin University,
M. T	Work in Different Thermal Conditions	(2015)	Australia
M. Tsai	Revisiting the power-duration relationship and	Ph.D.	University of Toronto
	developing alternative protocols to estimate	(2015)	
T. Ct	critical power parameters	DI D	H
J. Stapleton	Aging and heat stress: from rest to exercise	Ph.D. (2014)	University of Ottawa
J. Morentes	Doping prevention in elite athletes	Ph.D.	Universidad Granada,
J. Morentes	Doping prevention in ente atmetes	(2014)	Spain
K. Levels	Pacing strategies during exercise in the heat	Ph.D.	Vrije Universiteit
K. Levels	r acing strategies during exercise in the heat	(2014)	Amsterdam, the
		(2014)	Netherlands
P. Micalos	The effect of aerobic exercise on pain and	Ph.D.	Charles Sturt University,
1. Wilcaios	neurosensory modulation in healthy	(2013)	Australia
	participants and with chronic pain disorder	(2013)	Tustiana
Z. Schlader	Human Behavioral Temperature Regulation:	Ph.D.	Massey University, New
Z. Semader	An Exercise Approach	(2011)	Zealand Zealand
F. Marino	Anticipatory regulation of exercise intensity	D.Sc.	Charles Sturt University,
1.171411110	Timelipatory regulation of exercise intensity	(2010)	Australia
C. Nassif	Carbohydrate ingestion and exercise	Ph.D.	Charles Sturt University,
	performance in the heat: neuromuscular aspects	(2009)	Australia
	of fatigue	(====)	
T. Pretorius	Mechanisms involved in the effect of head	Ph.D.	University of Manitoba,
	cooling on the rate of decrease in core	(2009)	Canada
	temperature		
R. Tucker	The regulation of pacing strategy and exercise	Ph.D.	University of Cape Town,
	performance by a complex anticipatory system	(2006)	South Africa
A. Kacin	The role of absolute and relative work rates in	Ph.D.	University of Portsmouth,
	the sweat response during steady state exercise.	(2005)	United Kingdom
E. Coady	The effect of drug mitigated motion sickness	M.Sc.	Memorial University of
L. Coudy	on physiological and psychophysical	(2009)	Newfoundland, Canada
	performance	(300)	z z z z z z z z z z z z z z z z z z z
B. Wall	Effect of exercise-induced hypohydration on	M.Sc.	Edith Cowan University,
D. Wan	body temperature and cycling time-trial	(2007)	Australia
	performance in the heat with adequate facing	(/	
	windspeed.		
C.D. Palmer	Effects of head and neck cooling on	M.Ph.Ed.	University of Otago, New
C.D. Tumier	thermoregulation, pace selection, and	(2002)	Zealand
	performance during upright exercise in the	<u> </u>	
	heat.		
	1	1	

# B.Sc.K. (Honours)

Name	Project	Year of	Notes
		Degree	
P. Davison	Mechanisms of cold-induced	2017	3P99
	vasodilatation		

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D. Stewart	Hyperthermia effects on isometric and isotonic contractions	2017	3P99, NSERC USRA 2016
J. Vlaar	Mental skills training effects on exercise capacity in the heat	2015	NSERC USRA 2015
A. Masbou	Cranial cooling recovery during intermittent firefighting exercise in the heat	2013- present	
I. Kim	Separate and combined effects of hydration and thirst on exercise capacity in the heat	2013	NSERC USRA 2013
N. Stanov	Physiological signal recording using thermal imaging	2012	
C. Watson	Analysis of heart rate variability under environmental stress	2011	M.Sc. at Brock
D. Zaharieva	Effects of prolonged cold exposure on neuromuscular function	2011	M.Sc. at York
R. McLeod	Effects of water current on forearm cooling from hyperthermia	2010	NSERC USRA 2009
L. Rosso	Effects of sleep loss on cold-induced vasodilatation	2010	NSERC USRA 2008
N. Zouros	Reliability of the Wescor pilocarpine iontophoresis system for sweat collection	2009	Brock USRA 2008
C. Tweedie	Effects of dehydration and rehydration on repeated anaerobic capacity in females.	2007	NSERC USRA 2006
J. Totosy de Zepetnek	Effects of dehydration and rehydration on repeated anaerobic capacity in males.	2007	M.Sc. at U. Waterloo
M. Macdonald	Neural control of hand function with hand cooling	2006	Memorial University medical program
M. Knox	Effects of head/neck pre-cooling on kayak sprint performance	2005	Winner of 2005 Rhodes Scholarship Winner of 2003/04 W. Andrew MacKay scholarship and Dal Governor's Medal for academics and community service. NSERC USRA 2003, 2004
J. Ojah	Effects of cold distraction on vigilance and spatial attention	2004	Winner of M.J. Ellis research award. Dalhousie University medical program.
A. Marsh	Effects of mild body heating on vigilance and spatial attention	2004	M.Sc. candidate, Kinesiology,University of Calgary.
T. Mammen	Effects of facial immersion on dive response	2003	Winner of M.J. Ellis research award. University of Ottawa medical program.
M. Smith	Effects of apneic training on cold-water immersion	2002	Dalhousie University medical program.
D. Montie	Time course of manual impairment during cold-water immersion	2001	Project produced peer-reviewed publication (Aviat. Space Environ. Med)
R. Campbell	Localized versus General Rewarming from Hypothermia	2001	
R. Gillingham	Effects of Hypo- and Hyperthermia on Mathematical Processing	2001	M.Sc. @ DCIEM/DRDC

A. Robinson	Is pre-cooling of the core temperature an effective ergogenic aid for	2001	Project produced peer-reviewed publication (J. Sport Sci.)
	intermittent sprint exercise in temperate environments?		
A. Cash	Plyometric Training in Swimmers	2000	
N. D'Eon	Ergonomics of Emergency Breathing Systems	2000	Project produced peer-reviewed publication (Aviat. Space Environ. Med.)
D. Sweeney	Skin Temperature Measurement Methodology	2000	M.Sc. @ DCIEM/DRDC B.Sc.K. results presented at ACSM
K. Furneaux	Recovery in Elite Kayaking	2000	Olympic athlete

B.Eng. (Honours)

BiBlig. (1101			·
Name	Project	Year of	Notes
		Degree	
B. Webb	Thermal Data Loggers	2002	Co-op work term 2001.
		(pending)	
J. Coombes	The computerization of the	2001	
and D.	AGARD STRES cognitive		
Hooper	test battery		
C. Brideau	Thermal Control Suit	2001	
and J. Boyce			

## 17. Academic / Professional Service

#### Journals:

- Editorial Board: Temperature (2014-present)
- Editorial Board: Extreme Physiology and Medicine (2011-present)
- Editorial Board: International Journal of Sports Physiology & Performance (2013-present)

## Organizer:

- Executive Committee: International Conference on Environmental Ergonomics, 2007 present (Chair 2011-present).
- Organizing Committee: Canadian Society for Exercise Physiology annual conference, 2006 (~500 delegates)
- Organizer: Atlantic Provinces Exercise Scientist meeting, 2006 (~50 delegates)
- CSEP 2005 Symposium: Exercise in Environmental Extremes
- CSEP 2005 Symposium: Humans in the Spaceflight Environment

#### Board Member:

2012: Ontario Research Fund *Large Infrastructure Funds* Life Sciences panel: lead reviewer on 6 grants

#### Reviewer:

**2014:** 40 scientific manuscripts; 1 NSERC Discovery grant, 1 Mitacs Accelerate, 1 Ontario Ministry of Labour grant, 1 book proposal

- **2013:** 30 scientific manuscripts; 2 NSERC Discovery grants
- **2012:** 26 scientific manuscripts; 1 NSERC Discovery grant; 1 Mitacs Accelerate grant.

**2010:** NSERC Discovery Grant, Am. J. Physiol – Reg, Eur. J. Appl. Physiol., J. Appl. Physiol., Int. J. Therm. Biol., Aviat. Space Environ. Med., MITACS Accelerate Grant, Acta Physiologica, Muscle and Nerve.

**2009:** NSERC Discovery Grant, Am. J. Physiol – Reg, Eur. J. Appl. Physiol., Scand. J. Med Sport Sci (2 manuscripts), Br. J. Sports Med., Aviat Space Environ Med, J. Appl. Physiol., Am. J. Ind. Med., Int. J. Biometerol. (2 manuscripts), Med. Sci. Sports Exerc.

- Journal of Physiology, 2005-present
- Medicine and Science in Sports and Exercise, 2005-present
- International Journal of Biometeorology, 2008-present
- Clinical Neurophysiology, 2006-present
- Journal of Science and Medicine in Sport, 2005-present
- Experimental Physiology, 2004-present
- Applied Physiology, Nutrition and Metabolism, 2007-present
- International Journal of Sports Physiology and Psychology, 2006-present
- Medicine and Biology in Engineering and Computing, 2006-present
- Natural Science and Engineering Research Council, 2002-present
- Canadian Institute for Health Research, 2000-present
- Sports Medicine, 2003-present
- Aviation, Space, and Environmental Medicine, 2002-present
- Journal of Applied Physiology, 2002-present
- Journal of Science in Sports and Medicine, 2005-present
- European Journal of Applied Physiology, 1997-1998, 2007-present
- Canadian Journal of Applied Physiology, 1997-2005
- Worker Safety Insurance Board of Ontario, 2006
- Research Quarterly in Exercise Science, 2007-present
- Advances in Physiological Education, 2007-present
- Michael Smith Health Research Foundation, 2008
- Qatar National Research Foundation, 2008
- Pearson Educational Canada, 2008 (textbook proposal and draft review)

#### **Contributor**:

- Sport Science and Training Editor, <a href="www.pezcyclingnews.com">www.pezcyclingnews.com</a>, 2002-present. Since its inception in 2002, this site has grown to the top three international English language sites covering the sport of bicycling (> 450,000 unique readers per month). I am responsible for the writing and editing of weekly articles that translate and apply the latest in scientific findings to practical training advice.
- Regular contributor to Bike Talk Radio, 2010-2011. I make bi-monthly appearances on BTR to discuss training and fitness for this live and internet radio station, with a catchment area of approximately 5,000,000 in the northeast USA.

• Regular scientific contributor to Canadian Cycling magazine. 2010-present. I prepare regular columns for this cycling magazine (circulation 50,000) on fitness and training topics.

- Science's Next Wave (<a href="http://nextwave.sciencemag.org/">http://nextwave.sciencemag.org/</a>) 2001. I developed a fourpart series on "The New Faculty Experience" for SNW's Career Development Centre.
- Science's Next Wave (<a href="http://nextwave.sciencemag.org/">http://nextwave.sciencemag.org/</a>) 2002-2003. I developed a four-part series on "Academic Consultancy" for SNW's Career Development Centre.

President, Canadian Alumni of the International Space University (1996-1997).

Member, Canadian Foundation for the International Space University (1996-1997).

Secretary, Canadian Alumni of the International Space University (1995).

Member, Safety Committee, School of Kinesiology, Simon Fraser University (1992-1994).

## 18. Committees Served

#### \* Brock Service

\*Member, AVP-Research Search Committee (2017)

\*Member, Brock Biosciences Research Ethics Committee (2013 – present)

\*Member, AHSC Graduate Committee (2014 – 2016)

\*Member, Associate Vice-President Research (Social Sciences) search committee (2013)

\*Member, Brock University Biosafety Committee (2008 – 2009)

\*Member, Brock University Research Grants Committee (2009 – 2011)

\*Member, AHSC Graduate Committee (2008 – 2010)

\*Member, PEKN Search Committee (2008)

Member, Faculty of Health Professions Tenure and Promotion Committee (2006-2007)

Member, School of Health and Human Performance Ethics Committee (2006-2007)

Member, School of Health and Human Performance Search Committee (Kinesiology, 2004).

Chair, School of Health and Human Performance Tenure, Promotions, and Reappointments Committee (2003 – 2004)

Chair, Faculty of Graduate Studies: School of Physiotherapy Graduate Review Committee (2002-2003).

Member, Faculty of Health Professions Research Committee (2001- present).

Member, School of Health and Human Performance Search Committee (2001).

Member, School of Health and Human Performance Curriculum Overview Committee (2000 - present).

President, Bicycle Nova Scotia (2000 - 2002).

Member, Canada Games Technical Committee (1999 - present).

Organizer, School of Health and Human Performance Graduate Seminars (1998 - present).

Member, Healthy Dalhousie Committee (1998 - 1999).

## 19. Teaching Recognition

Nominated for Dalhousie University Faculty of Health Professions Teaching Excellence Award, 2005.

Listed in Maclean's Guide to Universities and Colleges (2001, 2002, 2003, 2004, 2005, 2006 editions) as one of Dalhousie University's "Popular Prof."

Invited Speaker: Canadian Society for Exercise Physiology symposium on "Teaching Exercise Physiology." 2004.

2003/04 recipient of School of Health and Human Performance student society's "Student Appreciation" award.

Nominated for Dalhousie Alumni Teaching Award in first year of eligibility (2000/2001).

My Environmental Physiology course (KINE 4410) was profiled in the London Times Higher Education Supplement (January 26, 2001, p. 24-25). This article was reprinted in the Dalhousie News (March 7, 2001).

Dalhousie University CIS Academic All-Canadian Luncheon Faculty Guest (1999, 2001, 2002, 2003, 2004, 2006).

Dalhousie University Office for Instructional Development and Technology teaching development grant (1999).

## 20. Awards, Publicity, and Honours

Canadian Cycling magazine web video on overtraining, September 24, 2013.

St. Catharines Standard profile on lab research, April 14, 2013.

Canada Foundations for Innovations website. I was profiled (November 28, 2012) for my work with Mark's Work Wearhouse on improving clothing design in the cold.

Canadian Cycling magazine. I was interviewed extensively for an article on cycling training with limited time (December 2012 issue).

Family Health magazine. I wrote an article "Staying Fit in the Cold" for this western Canadian magazine (circulation 90,000) geared towards family physicians.

Bicycling magazine. This is the largest bicycling magazine in the world (circulation >200,000). I was interviewed extensively for a print (July 2012) and online article on recovery methods.

Bicycling magazine. This is the largest bicycling magazine in the world (circulation >200,000). I was interviewed extensively for a print (December 2012) and online article on off-season training.

Physiotherapy Practice magazine. This is the primary member publication for the Canadian Physiotherapy Association. I was interviewed for an article on exercise in the cold, especially for those with chronic conditions (Winter 2012 issue)

CTV and Global TV national profile on our WSIB-Toronto Fire Service project, July 23, 2011.

Filming for Smithsonian Channel's "The Real Story" on cold stress during Apollo 13 mission, June 30, 2011.

Globe and Mail expert interview on hot yoga, June 19, 2011.

Toronto Star business section profile on NSERC Engage project with Mark's Work Wearhouse, April 14, 2011.

http://www.thestar.com/business/companies/article/974469--mark-s-tests-clothing-claims.

Scientific participant and advisor on "Hannibal – Ancients Behaving Badly" series on History Channel, January 30, 2010.

Canadian Geographic interview on cold stress physiology, January 2010 publication.

Canadian Society for Exercise Physiology Graduate Student Newsletter profile of Environmental Ergonomics Laboratory, November 2009.

CFI website profile, November 2009.

Feature profile on the EEL on Daily Planet, Discovery Channel, October 14, 2009.

Radio interview on the EEL on CKTB 610 Niagara Radio, October 13, 2009.

Live interview on the EEL on CTV's Canada AM, October 13, 2009.

Feature profile on the EEL on CTV's National News, October 10, 2009.

Environmental Ergonomics Laboratory Grand Opening. October 9, 2009. Attended by CFI and CRC representatives along with media. Event was covered by CHCH Hamilton TV and Cogeco TV along with St. Catharines Standard.

Keynote Speaker, *Mapping New Knowledges* conference, Brock University, May 1, 2009. "Work can be fun but fun can be work!"

Brock branding campaign profile, 2009.

Expert interview on CBC-TV during initial search for survivors of March 12, 2009 helicopter ditching off Newfoundland. I provided expert live commentary on immersion suits and survival probabilities.

Featured consultant on Discovery Channel's Guinea Pig show, episode "Hot Stuff" on heat stress in firefighters. January 28, 2008.

Interviewed on Niagara 610am radio on announcement of Canada Research Chair position at Brock University, December 4, 2007.

Feature interview on CBC Radio One across Canada concerning hypothermia research. February 23, 2007.

Feature profile on Canadian Press concerning rewarming from hypothermia. Published in eight different newspapers across Canada. January 23, 2007.

Interviewed on CBC Radio "World Report" as expert commentator on study from McMaster University (Gibala et al., J. Physiol.) on aerobic benefits of short, high intensity exercise. September 22, 2006.

Consulting scientist on "Lance Armstrong's War" by Daniel Coyle, a NY Times bestseller, 2005.

Feature profile on Discovery Channel Canada's "Daily Planet" news show concerning current research into mechanisms of neuromuscular fatigue with hyperthermia. September 2004.

Interviewed on CBC Radio "Mainstreet" to comment on the science and physiology of marathon running, coinciding with the Boston Marathon, April 12, 2004.

Profiled on Global Television's national health show "Body + Health." Profile on rewarming from hypothermia research. February 2004.

Profiled on Global Television's national health show "Body + Health." Profile on research into the effects of cold on manual dexterity. January 2004.

Interviewed on CBC Radio "Maritime Noon" as an expert on hypothermia research, January 20, 2004.

Interviewed on ATV Evening News as an expert on rewarming of hypothermic victims, January 19, 2004.

Interviewed on CBC "Quirks and Quarks" on the physiology of sweating (<a href="http://www.cbc.ca/quirks/archives/03-04/dec27.html">http://www.cbc.ca/quirks/archives/03-04/dec27.html</a>), December 27, 2003.

Interviewed on CBC "The National" regarding hematocrit and altitude tents in endurance sports in response to Genvieve Jeanson being disqualified from World Cycling Championships, Oct 11 2003.

Featured in Halifax International Airport Authority promotional video in HRM business kiosk.

Interview in Halifax Daily News on Thermal Control Suit, September 22, 2003.

Interview on ATV News as an expert in heat stress for story on health issues in hot environments, August 12, 2002.

Interview on ATV News as an expert in cold water survival for story on Polar Bear Swims, December 31, 2001.

Feature interview on CTV national news regarding my Thermal Control Suit. December 22, 2001.

Feature interview on Global TV national evening news regarding my Thermal Control Suit and its applicability to spacesuit design to coincide with Chris Hadfield's first Canadian spacewalk. Interview aired across Canada April 24, 2001.

Feature interview by @discovery.ca regarding my Thermal Control Suit and its applicability to spacesuit design to coincide with Chris Hadfield's first Canadian spacewalk. Interview aired April 23, 2001.

City of Hamilton Civic Award (1997).

Canadian Foundation for the International Space University Scholarship (1994).

Samuel and Leatrice Cohen Prize in Environmental Physiology, Simon Fraser University (1993).

Department of National Defence Research Assistantship, Defence and Civil Institute of Environmental Medicine (1992, 1993).

Gordon M. Shrum Entrance Scholarship, Simon Fraser University (1986).

University Entrance Scholarship, University of British Columbia (1986).

University Entrance Scholarship, Province of British Columbia (1986).