### **CURRICULUM VITAE**

### SAIED JALAL ABOODARDA, Ph.D.

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### **CURRENT POSITION**

**July 2019** – Assistant Professor

**Present** Faculty of Kinesiology

University of Calgary

Calgary, AB

Oct 2015 – Post-doctoral Fellow

**Dec 2018** Research Topic: Etiology of acute and chronic fatigue in people with multiple

sclerosis.

Faculty of Kinesiology, University of Calgary, Calgary, Alberta, Canada

Supervisor: Professor Guillaume Millet

July 2012 – Post-doctoral Fellow

Oct 2015 Research Topic: Corticospinal and motoneurone excitability and non-local

muscle fatigue.

School of Human Kinetics and recreation, Memorial University of Newfoundland,

St John`s, Newfoundland and Labrador, Canada

Supervisor: Professor David Behm

Aug 2007 – Doctor of Philosophy, Exercise Physiology and Exercise Science

June 2012 PhD Thesis Title: Acute Neuromuscular, Hormonal and Morphological

responses following Variable External Resistance Exercises

Sports Center, University of Malaya, Kuala Lumpur, Malaysia

Supervisor: Dr. Ashril Yusof

**Aug 2003** – Master of Physical Education and Sport Science

Aug 2005 Thesis Title: Validation of Octal test for talent identification in hand-ball sports

Faculty of Physical Education, Esfahan University, Esfahan, Iran Supervisors: Dr. Vahid Zolactaf and Dr. Seyed Mohammad Marandi

### **RESEARCH INTERESTS**

Fatigue and pain perception mechanisms, neurophysiology, multiple sclerosis-related neuromuscular fatigue, corticospinal excitability measurement, neuromuscular adaptations to physical activity.

## **GRANTS AND AWARDS**

2016-2018	Eyes High Post-doctoral fellowship, University of Calgary, Canada (CAD 100,000)
2013-2015	MITACS Post-doctoral fellowship, Canada (CAD 60,600)
2012-2013	Research fellowship, Memorial University of Newfoundland, Canada (CAD 20,000)
2011	Young investigator travel award, European College of Sport Science (ECSS) Congress, Liverpool, UK (CAD 772)
2010	American College of Sports Medicine (ACSM) Travel award (CAD 1,362)
2009-2010	University of Malaya research award, Malaysia RM 15,000 (CAD 4,871)
2008-2009	University of Malaya research award, Malaysia RM 30,000 (CAD 9,741)
2007-2010	University of Malaya PhD scholarship award, Malaysia RM 70,000 (CAD 22,800)

### **RESEARCH EXPERIENCE**

(2015 - Now) Post-Doctoral Fellowship. Supervisor: Professor Guillaume Millet.

Neuromuscular Fatigue Laboratory, Faculty of Kinesiology, University of Calgary. Investigated neuromuscular fatigue in people with multiple sclerosis (PwMS) to determine the influence of a rehabilitational exercise protocol on the corticomotoneuronal pathway responses as well as physical and cognitive fatigue resistance in PwMS. Used transcranial magnetic stimulation (TMS) as well as electrical stimulation of spinal cord (CMES, TMEP) and muscles (PNS) to determine the underlying mechanisms of neuromuscular fatigue

development in PwMS. Quantified the relationship between neuromuscular, cardiovascular and cardiorespiratory outputs, as well as cognitive function, level of physical activity and quality of life in PwMS to develop tailored rehabilitational strategies.

(2012 – 2015) Post-Doctoral Fellowship. Supervisors: Professor David G. Behm, Dr. Kevin Power and Dr. Duane Button. Faculty of Human Kinetics and Recreation, Memorial University of Newfoundland, Canada. Applied advance neurophysiological measurement techniques such as TMS, CMEP, TMEP and PNS to investigate the motor cortical, spinal motoneuronal and muscle responses following various modes of exercise-induced pain and neuromuscular fatigue.

(2010 - 2012) Research Associate. Faculty of Medicine, University of Malaya, Malaysia. Supervisor: Dr. Abdul Halim Mokhtar. Investigated rehabilitation protocols on muscle hypertrophy and atrophy after anterior cruciate ligament reconstruction Also assessed the influence of eccentric loading during accentuate countermovement and drop jumps (using elastic resistance material) to enhance stretch-shortening cycle mechanics.

### **SUMMARY OF THE RESEARCH OUTPUTS (April 2019)**

<u>Specification</u>	<u>Qty</u>
Papers in peer-reviewed ISI journals	35
Peer-reviewed ISI Journal articles under review	2
Peer-reviewed ISI journal abstracts	16

Google scholar citations: 900 h-index: 18 i-10 index: 20

### PEER-REVIEWED SCIENTIFIC PUBLICATIONS

(\* Indicates trainees under my supervision/mentorship)

- 1. Renata L. Krüger, **Saied Jalal Aboodarda**, Libia Marcela Jaimes, Pierre Samozino, GuillaumeY. Millet. Age-Related Neuromuscular Fatigue and Recovery after Cycling Exercises: Measurements in Isometric Mode. *The* (*Under review August* 2019). **Experimental Gerontology. Journal impact factor: 3.597.**
- 2. **Saied Jalal Aboodarda**, Danilo Iannetta, Nader Emami\*, Giorgio Varesco\*, Juan M Murias, Guillaume Y Millet. Effects of pre-induced fatigue vs. concurrent pain on exercise tolerance, neuromuscular performance and corticospinal responses of locomotor muscles. *The Journal of Physiology*, (Epub ahead of print) 2019/12/11. **Journal impact factor: 4.95.**

- 3. **Saied Jalal Aboodarda**, Selina Fan\*, Kyla Coates\*, Guillaume Y. Millet. The short-term recovery of central fatigue and corticomotor responses in elbow flexors. *BMC in Neuroscience*. 2019: 20 (1), 9. **Journal impact factor: 2.75.**
- 4. **Saied Jalal Aboodarda**, Cindy Zhang\*, Ruva Sharara\*, Madeleine Cline\*, Guillaume Y Millet. Exercise-induced fatigue in one leg does not impair the neuromuscular performance in the contralateral leg but improves the excitability of the ipsilateral corticospinal pathway. *Brain Sciences*. 2019, 9 (10), 250. **Journal impact factor: 2.79.**
- 5. Renata L. Krüger, **Saied Jalal Aboodarda**, Libia Marcela Jaimes, Pierre Samozino, GuillaumeY. Millet. Cycling Exercises Performed at Different Intensities-Durations in Men: Neuromuscular Fatigue and Recovery Kinetics Revisited. *Applied Physiology, Nutrition, and Metabolism* (Epub ahead of print 2019). **Journal impact factor: 2.518.**
- 6. Renata L. Krüger\*, **Saied Jalal Aboodarda**, Libia Marcela Jaimes, Pierre Samozino, Guillaume Y. Millet. Cycling Exercises at Different Intensities: Neuromuscular Fatigue Revisited. *Journal of Experimental Biology, jeb.* 2019: 197483. **Journal impact factor: 3.32.**
- 7. Jose Mira, **Saied Jalal Aboodarda**, Mirco Floreani, Roger Jaswal\*, Sung Jun Moon\*, Khaled Amery, Thomas Rupp, Guillaume Y Millet. Effects of endurance cycling training on neuromuscular fatigue. Part I: strength loss and muscle fatigue. *European Journal of Applied Physiology*. 2018: 118 (11), 2281-2293. **Journal impact factor: 2.130**
- 8. **Saied Jalal Aboodarda**, Jose Mira, Mirco Floreani, Roger Jaswal\*, Sung Jun Moon\*, Khaled Amery, Thomas Rupp, Guillaume Y Millet. Effects of endurance cycling training on neuromuscular fatigue. Part II: corticospinal excitability and voluntary activation. *European Journal of Applied Physiology.* 2018: 118 (11), 2295-2305. **Journal impact factor: 2.130**
- 9. Renata L. Kruger\*, **Saied Jalal Aboodarda**, Pierre Samozino, Charles L. Rice, Guillaume Y. Millet. Isometric vs. Dynamic Measurements of Fatigue: Does Age Matter? A Meta-analysis. *Medicine and Science in Sports and Exercise*. 2018: 50 (10), 2132-2144. **Journal impact factor: 4.459**
- 10. **Saied Jalal Aboodarda**, Rebecca M Greene\*, Devin T Philpott, Roger S Jaswal\*, Guillaume Y Millet, David G Behm. The effect of rolling massage on the excitability of the corticospinal pathway *Applied Physiology*, *Nutrition*, *and Metabolism* 2017: 43 (4), 317-323. **Journal impact factor: 2.518**
- 11. Olaf Prieske, **Saied Jalal Aboodarda**, José A. Benitez Sierra, David G. Behm, Urs Granacher. Slower but not faster unilateral fatiguing knee extensions alter contralateral limb performance without impairment of maximal torque output. *European Journal of Applied Physiology* 2017: 117(2):323-334. **Journal impact factor: 2.130**
- 12. Rosie Twomey, **Saied Jalal Aboodarda**, Renata Kruger\*, Susan Nicole Culos-Reed, John Temesi, Guillaume Y Millet, Neuromuscular fatigue during exercise: Methodological

- considerations, etiology and potential role in chronic fatigue. *Neurophysiologie Clinique/Clinical Neurophysiology* 2017: 47(2):95-110. **Journal impact factor: 2.045**
- 13. Nemanja Šambaher\*, **Saied Jalal Aboodarda**, David G. Behm. Bilateral knee extensor fatigue modulates force and responsiveness of the corticospinal pathway in the non-fatigued, dominant elbow flexors. *Frontiers in Human Neuroscience* 2017: 10, 18. **Journal impact factor: 3.209**
- 14. **Saied Jalal Aboodarda**, Phillip A. Page, and David George Behm. Muscle Activation Comparisons between Elastic and Isoinertial Resistance: A Meta-Analysis. *Clinical Biomechanics* 2016: 39:52-61. **Journal impact factor: 1.874**
- 15. **Saied Jalal Aboodarda**, Nemanja Šambaher\*, Guillaume Y. Millet, David G. Behm. Knee extensors neuromuscular fatigue changes the corticospinal pathway excitability in biceps brachii muscle, *Neuroscience* 2017: 340:477-486. **Journal impact factor: 3.327**
- 16. **Saied Jalal Aboodarda**, Nemanja Šambaher\*, David G. Behm. Unilateral elbow flexion fatigue modulates responsiveness of the corticospinal pathway in non-fatigued contralateral biceps brachii. *Scandinavian Journal of Medicine & Science in Sports* 2017: 26(11):1301-1312. **Journal impact factor: 3.331**
- 17. Mark Tyler Cavanaugh\*, Alexander Döweling, James Douglas Young, Patrick John Quigley, Joseph H.D. Whitten, Jonathan C. Reid, **Saied Jalal Aboodarda**, David G. Behm. An acute session of roller massage prolongs voluntary and tetanic force development and diminishes evoked pain. *European Journal of Applied Physiology* 2017: 117(1):109-117. **Journal impact factor: 2.130**
- 18. Mark Tyler Cavanaugh\*, **Saied Jalal Aboodarda**, Daniel Hodgson, David George Behm. Foam Rolling of Quadriceps Decreases Biceps Femoris Activation, *Journal of Strength and Conditioning Research* 2017: 31(8):2238-2245. **Journal impact factor: 2.060**
- 19. Nemanja Šambaher\*, **Saied Jalal Aboodarda**, Dustin Silvey, Duane C. Button, David G. Behm. The effect of an ankle compression garment on fatigue and performance, *Journal of Strength and Conditioning Research* 2016: 30(2):326-35. **Journal impact factor: 2.060**
- 20. Mark Tyler Cavanaugh\*, Saied Jalal Aboodarda, David George Behm. Intra- and Intersession Reliability of Quadriceps' and Hamstrings' Electromyography during a Standardized Hurdle Jump Test with Single Leg Landing. *Journal of Strength and Conditioning Research* (2016 Sep 6. Epub ahead of print). PMID: 27642857. Journal impact factor: 2.060
- 21. **Saied Jalal Aboodarda**, David Copithorne, Kevin E. Power, Eric J. Drinkwater and David G. Behm. Elbow flexor fatigue modulates central excitability of the knee extensors. *Applied Physiology, Nutrition, and Metabolism* 2015: 40(9): 924-930. **Journal impact factor:** 2.518.

- 22. **Saied Jalal Aboodarda**, Alyssa J Spence, and Duane C.Button. Pain pressure threshold of a muscle tender spot increases following local and non-local rolling massage. *BMC Musculoskeletal Disorders* 2015: 16(1):265. **Journal impact factor: 1.739**
- 23. **Saied Jalal Aboodarda**, David B. Copithorne, Gregory E.P. Pearcey, Duane C. Button and Kevin E. Power. Changes in supraspinal and spinal excitability of the biceps brachii following brief, non-fatiguing submaximal contractions of the elbow flexors in resistance-trained males *Neuroscience Letter* 2015: 607, 21, 66–71. **Journal impact factor: 2.026**
- 24. **Saied Jalal Aboodarda**, Phillip A. Page, and David G. Behm, Eccentric and Concentric Jumping Performance during Augmented Jumps with Elastic Resistance: A Meta-Analysis. *International Journal of Sports Physical Therapy* 2015: 10 (6) 839-849. **Journal impact factor: 1.68**
- 25. **Saied Jalal Aboodarda**, Halim Mokhtar, Barry Wilson, Michael Samson, Jeannette Byrne, David Behm. Does performing drop jumps with additional eccentric loading improve jump performance? *Journal of Strength and Conditioning Research* 2014: 28(8):2314-23. **Journal impact factor: 2.060**
- 26. Israel Halperin\*, **Saied Jalal Aboodarda**, Fabien A Basset, Jeannette M. Byrne and David G Behm. Pacing strategies during repeated maximal voluntary contractions. *European Journal of Applied Physiology* 2014: 114:1413–1420. **Journal impact factor: 2.130**
- 27. Israel Halperin\*, **Saied Jalal Aboodarda**, David G. Behm. Knee extension fatigue attenuates repeated force production of the elbow flexors. *European Journal of Sport Science* 2014: 14(8):823-9. **Journal impact factor: 2.690**
- 28. Jon E. Kawamoto\*, **Saied Jalal Aboodarda**, and David.G. Behm. Effect of differing intensities of fatiguing dynamic contraction on contralateral homologous muscle performance *Journal of Sport Science and Medicine* 2014: 13, 836-845. **Journal impact factor: 1.797**
- 29. Israel Halperin\*, **Saied Jalal Aboodarda**, Duane C. Button, Lars Andersen and David G. Behm Roller massager improves range of motion of plantar flexor muscles without subsequent decreases in force parameters. *International Journal of Sports Physical Therapy* 2014: 9 (1): 92-102. **Journal impact factor: 1.68**
- 30. Israel Halperin\*, **Saied Jalal Aboodarda**, Fabien A Basset and David G Behm. Knowledge of repetitions range affects force production in trained females *Journal of Sport Science* and *Medicine* 2014: 13, 736 741. **Journal impact factor: 1.797**
- 31. David G. Behm, Ashley Peach, Meaghan Maddigan, **Saied Jalal Aboodarda**, Mario C. DiSanto, Duane C. Button, Nicola Maffiuletti. Massage and stretching inhibit H-reflex / M-wave ratio without affecting evoked contractile properties. *Journal of Electromyography and Kinesiology* 2013: 23(5):1215-21. **Journal impact factor: 1.510**

- 32. **Saied Jalal Aboodarda**, Mohamad Shariff A. Hamid, Ahmad Munir Che Muhamed, Fatimah Ibrahim & Martin Thompson. Resultant muscle torque and electromyographic activity during high intensity elastic resistance and free weight exercises, *European Journal of Sport Science* 2013: 13(2): 155-163. **Journal impact factor: 2.690**
- 33. **Saied Jalal Aboodarda**, Ashril Yosuf, N.A. Abu Osman, Martin W. Thompson, A. Halim Mokhtar. The contribution of elastic resistance during the eccentric phase of a countermovement jump enhances performance. *International Journal sports physiology and performance* 2013: 8, 181 187. **Journal impact factor: 2.654**
- 34. **Saied Jalal Aboodarda**, Fatimah Ibrahim, Halim Mokhtar, Martin Thompson, David Behm. Acute Neuromuscular and Hormonal Responses to Resistance Exercise Using Variable External Resistance Loading. *Journal of Exercise Physiology Online* 2012: 15(6):1-12.
- 35. **Saied Jalal Aboodarda**, John George, Halim Mokhtar, Martin Thompson. Muscle Strength and Damage Following Two Modes of Variable Resistance Training. *Journal of Sport Science and Medicine* 2011: 10, 635-642. **Journal impact factor: 1.797**
- 36. **Saied Jalal Aboodarda**, Fatimah Ibrahim, Shariff A Hamid, Ahmad M.C Muhamed, Ashril Yusof. Resultant Muscle Torque and EMG activity during high intensity elastic resistance and nautilus machine exercises. *Journal of Human Kinetics* 2011: 30: 5-13. **Journal impact factor: 1.014**
- 37. **Saied Jalal Aboodarda**, Fatimah Ibrahim, Ashril Yusof, Noor.A. Osman. Two Practical Strategies for Developing Resultant Muscle Torque Production Using Elastic Resistance Device. *International Federation for Medical and Biological Engineering* (IFMBE) 2011: 35, 241-244 (Springer link-Cited).

### PEER-REVIEWED SCIENTIFIC MANUSCRIPTS UNDER REVIEW

(\* Indicates trainees under my supervision/ mentorship)

1. Kyla Coates, **Saied Jalal Aboodarda**, Tristan Martin, Renata Krüger, Launne Metz, Scott Jarvis, Guillaume Millet Is fatigability measured during whole-body exercise involved in multiple sclerosis-related fatigue? Multiple sclerosis Journal. (*Under review December* 2019). **Journal impact factor: 5.28.** 

### PEER-REVIEWED JOURNAL ABSTRACTS

(\* Indicates trainees under my supervision/ mentorship)

Nader Emami\*., Saied Jalal Aboodarda, Georgio Varesco\*, Danilo Iannetta, Juman M. Murias, and Guillaume Y. Millet. The effects of pain on endurance performance, central fatigability, and corticospinal excitability of the contralateral knee extensor muscle: preliminary results. *Applied Physiology*, *Nutrition*, *and Metabolism*. 43: S56 (2018) ttps://doi.org/10.1139/apnm-2017-0265.

- 2. Renata L. Krüger\*, **Saied Jalal Aboodarda**, Libia M. Jaimes, Pierre Samozino, and Guillaume Y. Millet Age-related fatigability responses after cycling exercises performed at different intensities-durations. *Applied Physiology*, *Nutrition*, *and Metabolism*. 43: S70 (2018) ttps://doi.org/10.1139/apnm-2017-0265.
- 3. Kyla. Coates\*, **Saied Jalal Aboodarda**, Renata Kruger\*, Scott. Jarvis, Luanne Metz, and Guillaume Y. Millet. The mechanisms of neuromuscular fatigue from cycling and its relationship to chronic fatigue in people with Multiple Sclerosis. *Applied Physiology*, *Nutrition*, *and Metabolism*. 43: S52 (2018) ttps://doi.org/10.1139/apnm-2017-0265.
- 4. **Saied Jalal Aboodarda**, Selina Fan, Guillaume Y. Millet. Time course of short-term recovery of corticospinal excitability and inhibition. *Applied Physiology, Nutrition, and Metabolism*. 42: S57–S105 (2017) dx.doi.org/10.1139/apnm-2017-0432
- 5. **Saied Jalal Aboodarda**, Jose Mira, Mirco Floreani, Roger Jaswal, Sung Jun Moon, Khaled Amery, Thomas Rupp, Guillaume Y Millet. Effects of training on corticospinal excitability in cycling. *Applied Physiology, Nutrition, and Metabolism.* 42: S57–S105 (2017) dx.doi.org/10.1139/apnm-2017-0432
- 6. Kyla Coates\*, **Saied Jalal Aboodarda**, Scott Jarvis, Luanne Metz and Guillaume Millet. The mechanisms of neuromuscular fatigue due to whole-body exercise in people with Multiple Sclerosis: Preliminary results *Applied Physiology*, *Nutrition*, *and Metabolism*. 42: S57–S105 (2017) dx.doi.org/10.1139/apnm-2017-0432
- 7. Renata L. Kruger\*, **Saied Jalal Aboodarda**, Marcela L. Jaimes, Pierre Samozino, Guillaume Y. Neuromuscular fatigue after cycling exercise at different durations and intensities revisited. *Applied Physiology*, *Nutrition*, *and Metabolism*. 42: S57–S105 (2017) dx.doi.org/10.1139/apnm-2017-0432
- 8. Renata L. Kruger\*, **Saied Jalal Aboodarda**, Marcela L. Jaimes, Pierre Samozino, Guillaume Y. Velocity and torque contribute distinctively to the duration of power output after fatiguing cycling exercises of different duration and intensities. *Applied Physiology, Nutrition, and Metabolism.* 42: S57–S105 (2017) dx.doi.org/10.1139/apnm-2017-0432
- Patrick John Quigley, Mark Tyler Cavanaugh\*, Alexander Döweling, James Douglas Young, Joseph H.D. Whitten, Jonathan C. Reid, Saied Jalal Aboodarda, David G. Behm. An acute session of roller massage prolongs voluntary and tetanic force development and diminishes evoked pain. *Applied Physiology, Nutrition, and Metabolism.* 41: S337–S398 (2016) dx.doi.org/10.1139/apnm-2016-0366
- 10. **Saied Jalal Aboodarda**, Rebecca M Greene, Devin T Philpott, Millet, David G Behm The effect of rolling massage on the excitability of the corticospinal pathway: a pilot study. *Applied Physiology, Nutrition, and Metabolism* 2015, 40(9 (Suppl. 1)): S1-S69, 10.1139/apnm-2015-0359.

- 11. **Saied Jalal Aboodarda**, Kevin Power, David Copithorne, Eric J Drinkwater, David G Behm. Upper Body Fatiguing Protocols Decreased Voluntary Activation and Increased Motoneurone Excitability of Non-Fatigued Knee Extensors. *Medicine and Science in Sports and Exercise* 2014, 46 (5), 857-858.
- 12. **Saied Jalal Aboodarda**, Kevin Power, David G. Behm, Elbow flexor fatigue modulates central excitability of the knee extensors. *Applied Physiology, Nutrition, and Metabolism*, 2014, 39(S1). 10.1139/apnm-2014-0270.
- 13. **Saied Jalal Aboodarda**, Nemanja Šambaher, David Behm. Exercise-induced fatigue in one limb modulates responsiveness of the corticospinal pathway in non-fatigued contralateral limb. *Applied Physiology, Nutrition, and Metabolism*, 2014, 39(S1). 10.1139/apnm-2014-0270.
- 14. Nemanja Šambaher\*, Dustin B. Silvey, **Saied Jalal Aboodarda**, Duane C. Button, David G. Behm. Effects of Ankle Compression Sleeve on Fatigue and Performance. *Applied Physiology*, *Nutrition*, *and Metabolism*, 2014, 39(S41). 10.1139/apnm-2014-0270.
- 15. David B. Copithorne, Greg E.P. Pearcey, **Saied Jalal Aboodarda**, Duane C. Button and Kevin E. Power. The effect of repeated submaximal contractions on central and peripheral excitability in the biceps brachii. *Applied Physiology, Nutrition, and Metabolism*, 38: 1019–1091 (2013) dx.doi.org/10.1139/apnm-2013-0299
- 16. **Saied Jalal Aboodarda**, Fatimah Ibrahim, Ashril Yusof, Martin Thompson. Neuromuscular and Hormonal responses to resistance exercise using Nautilus Machine Versus Elastic Resistance. *Medicine and Science in Sports and Exercise*, (2011), Volume 43:5.

# PRESENTATIONS AS A GUEST SPEAKER (Conference / Symposium / Seminar Presentations)

- 1. **Saied Jalal Aboodarda**. Neurophysiology of pain and motor control. Three minutes presentation. HPL Seminar, Faculty of Kinesiology, University of Calgary, Alberta, Canada (2018).
- 2. **Saied Jalal Aboodarda**. Fatigue in multiple sclerosis. HPL Seminar, Faculty of Kinesiology, University of Calgary, Alberta, Canada (2017).
- 3. **Saied Jalal Aboodarda**. Neurophysiological mechanisms of fatigue in multiple sclerosis. monthly seminar, Department of Clinical Neurology, Faculty of Medicine, University of Calgary, Alberta, Canada (2016).
- 4. **Saied Jalal Aboodarda**. Central vs. peripheral mechanism of fatigue (A debate with Dr. Jared Fletcher), Faculty of Kinesiology, University of Calgary, Alberta, Canada (2016).

- 5. **Saied Jalal Aboodarda**. Cross-over neuromuscular fatigue, HPL Seminar, Faculty of Kinesiology, University of Calgary, Alberta, Canada (2016).
- 6. **Saied Jalal Aboodarda**. Training adaptations to variable external resistance exercises. School of Human Kinetics and Recreation, Memorial University of Newfoundland, St. John's, Newfoundland and Labrador, Canada
- 7. **Saied Jalal Aboodarda**. Acute Neuromuscular, Hormonal and Morphological responses following Variable External Resistance Exercises. The University of Sydney and University of Malaya seminar, Sports Center, University of Malaya. Kuala Lumpur, Malaysia

### NATIONAL/INTERNATIONAL CONFERENCE PRESENTATIONS

- 1. **Saied Jalal Aboodarda**, Selina Fan, Guillaume Y. Millet. Time course of short-term recovery of corticospinal excitability and inhibition. CSEP annual meeting. Winnipeg, Manitoba, Canada (2017).
- 2. **Saied Jalal Aboodarda**, Jose Mira, Mirco Floreani, Roger Jaswal, Sung Jun Moon, Khaled Amery, Thomas Rupp, Guillaume Y Millet. Effects of training on corticospinal excitability in cycling. . CSEP annual meeting. Winnipeg, Manitoba, Canada (2017).
- 3. **Saied Jalal Aboodarda**, Rebecca M Greene, Devin T Philpott, Millet, David G Behm. The effect of rolling massage on the excitability of the corticospinal pathway: CSEP, Hamilton, Ontario, Canada (2015).
- 4. **Saied Jalal Aboodarda**, Kevin Power, David G. Behm, Elbow flexor fatigue modulates central excitability of the knee extensors. CSEP, St John's, Newfoundland, Canada (2014).
- 5. **Saied Jalal Aboodarda**, Nemanja Šambaher, David Behm Exercise-induced fatigue in one limb modulates responsiveness of the corticospinal pathway in non-fatigued contralateral limb. CSEP, St John's, Newfoundland, Canada (2014).
- 6. Israel Halperin, **Saied Jalal Aboodarda**, F.A. Basset, J.M. Byrne and D.G. Behm. Pacing strategies during repeated maximal voluntary contractions. European college of sports science. Amsterdam, Netherlands (2014).
- 7. **Saied Jalal Aboodarda**, Fatimah Ibrahim; Ashril Yusof, Noor.A. Abu Osman. Two Practical Strategies for Developing Resultant Muscle Torque Production Using Elastic Resistance Device. International Federation for Medical and Biological Engineering and 5th International Conference on Biomedical Engineering, Kuala Lumpur (2011).
- 8. **Saied Jalal Aboodarda**; Fatimah Ibrahim; Mohamad Shariff A Hamid; Ahmad Munir Che Muhamed. Electromyographic and Resultant Muscle Torque Pattern Using Variable Resistance Exercise Devices. III International Conference of Physical Education and Sports Science. National Institute of Education, Singapore, (2010).

- 9. **Saied Jalal Aboodarda**; Mohamad Shariff Hamid; Munir Che Muhammed Electromyographic and Biomechanical Parameters Using Thera-Band and Nautilus Machine. 15<sup>th</sup> annual Congress of the European college of sport science. Antalya, Turkey, (2010).
- 10. **Saied Jalal Aboodarda**, Ahmad Munir Che Muhammed. Electromyographic Activity and Resultant Muscle Torque Using Elastic Resistance and Nautilus Machine Exercises. 1<sup>st</sup> International Conference of Sports and Exercise Science. Bangkok, Thailand (2009).
- 11. **Saied Jalal Aboodarda**; Fatimah Ibrahim; Shariff A. Hamid; Ahmad Munir Che Muhamed. Electromyographic activity using elastic ressitnace and free weights. International Conference for Technical Postgraduates (TECHPOS). Kuala Lumpur Malaysia (2009).
- 12. **Saied Jalal Aboodarda**; Mohamad Shariff A. Hamid; Ahmad Munir Che Muhammed. Muscle activations, torque development and loading profile of the muscles during maximal elastic resistance, nautilus machine and weight training exercises. 4<sup>th</sup> Asia-Pacific Conference on Exercise and Sports Science & 8<sup>th</sup> International Sports Science Conference. Malaysia. (2009).

### **TEACHING EXPERIENCES**

Fall 2017	Introduction to Motor Control and Learning (250 undergraduate students) – 20 lectures, Faculty of Kinesiology, University of Calgary, Canada.
Spring 2017	Neurophysiology of pain and motor control (4 graduate students) – 6 hours, Faculty of Kinesiology, University of Calgary, Canada.
Fall 2016	Introduction to Motor Control and Learning (250 undergraduate students) – 20 lectures, Faculty of Kinesiology, University of Calgary, Canada.
Spring 2016	Etiology of fatigue (6 graduate students) – 6 hours, Faculty of Kinesiology, University of Calgary, Canada.
2009-2010	Applied Exercise Physiology I & II (35 undergraduate students) - 20 lectures (4 months) – University of Malaya, Malaysia.
2009-2010	Athletic Training Prescription (15 undergraduate students) - 20 lectures (4 months) – University of Malaya, Malaysia.
2009 - 2011	Resistance Training Programming (25 undergraduate students) - 20 lectures (4 months) – University of Malaya, Malaysia.
2008-2010	Swimming in Sport Activity Classes (15 undergraduate students) – 4 months – University of Malaya, Malaysia.

2003-2006 Swimming in sport Activity Classes, (15 undergraduate students) – 6 months University of Esfahan, Iran.

### **Students Co-supervision and/or mentorship**

Post graduate research students (Masters and PhD, Full time)

- **Name:** Renata Kruger **Thesis title:** "Isometric vs. Dynamic Measurements of Fatigue: Does Age Matter" **Institute:** Faculty of Kinesiology, University of Calgary, Canada **Degree:** Ph.D.
- **Name:** Fatemeh Aslanzadeh **Thesis title:** "Central fatigue in adolescents with scoliosis" **Institute:** Faculty of Kinesiology, University of Alberta, Canada **Degree:** Ph.D.
- **2016 2018**Name: Kyla Coates Thesis title: "Etiology of Fatigue in Multiple Sclerosis" Institute: Faculty of Kinesiology, University of Calgary, Canada Degree: Master of Science.
- 2017 2018 Name: Giorgio Varesco Thesis title: "The effects of cycling exercise on central fatigability and corticospinal excitability of the contralateral knee extensors" Institute: Department of Neurological, Neuropsychological, Morphological and Movement Sciences, University of Verona, Italy Degree: Master of Science.
- 2014 2015 Name: Mark Tyler Cavanaugh Thesis title: "Foam Rolling of Quadriceps Decreases Biceps Femoris Activation" Institute: School of Human kinetic and recreation, Memorial University of Newfoundland, Canada, Degree: Master of Science, (Finished).
- Name: Nemanja Šambaher Thesis title: "Bilateral knee extensor fatigue modulates force and responsiveness of the corticospinal pathway in the non-fatigued, dominant elbow flexors" Institute: School of Human kinetic and recreation, Memorial University of Newfoundland, Canada, Degree: Master of Science, (Finished).
- 2013- 2014 Name: Jon-Erik Kawamoto Thesis title: "Effect of differing intensities of fatiguing dynamic contractions on contralateral homologous muscle performance" Institute: School of Human kinetic and recreation, Memorial University of Newfoundland, Canada, Degree: Master of Science, (Finished).

2013 - 2015 Name: Israel Halperin - Thesis title: "Pacing strategies during repeated maximal voluntary contractions" - Institute: School of Human kinetic and recreation, Memorial University of Newfoundland, Canada, - Degree: Master of Science, (Finished).

### Undergraduate Student Honours Projects (final year project):

- **Name:** Nader Emami **Honors project title:** "The effects of cycling exercise on central fatigability and corticospinal excitability of the contralateral knee extensors" **Institute:** Faculty of Kinesiology, University of Calgary, Canada July 2017 until now **Degree:** Honors Thesis.
- 2017 2018 Name: Xinyu Zhang- Project title: "Exercise induced fatigue in contralateral limb alters neuromuscular performance and pacing strategies" Institute: Faculty of Kinesiology, University of Calgary, Canada Degree: PURE project (Finished).
- **Name:** Madeleine Cline **Project title:** "The effect of fatiguing exercise in one limb on excitation and inhibition of neuromuscular system controlling the contralateral limb" **Institute:** Faculty of Kinesiology, University of Calgary, Canada **Degree:** Markin project (**Finished**).
- Name: Roger Jswal Honors project title: "Effects of endurance cycling training on neuromuscular fatigue. Part II: corticospinal excitability and voluntary activation" Institute: Faculty of Kinesiology, University of Calgary, Canada Degree: Honors Thesis (Finished).
- **Name:** Suan Jun Moon **Honors project title:** "Effects of endurance cycling training on neuromuscular fatigue. Part I: strength loss and muscle fatigue" **Institute:** Faculty of Kinesiology, University of Calgary, Canada **Degree:** Honors Thesis (**Finished**).
- **Name:** Selina Fan **Honors project title:** "The short-term recovery of central fatigue and corticomotor responses in elbow flexors" **Institute:** Faculty of Kinesiology, University of Calgary, Canada **Degree:** Honors Thesis (**Finished**).
- 2014-2015 Name: Rebecca M Greene Project title: "Rolling massage and excitability of the corticospinal pathway" Institute: School of Human kinetic and recreation, Memorial University of Newfoundland, Canada, 2015, Canada Degree: Summer project (Finished).

### Advisory committees

**2016 – Now** Name: Renata Kruger - Title: "Isometric vs. Dynamic Measurements of

Fatigue: Does Age Matter" - **Institute:** Faculty of Kinesiology, University

of Calgary, Canada - **Degree:** PhD.

2016 - 2018 Name: Kyla Coates - Title: "Etiology of Fatigue in Multiple Sclerosis" -

**Institute:** Faculty of Kinesiology, University of Calgary, Canada - **Degree:** 

Master of Science.

# PROFESIONAL SERVICE & MEMBERSHIPS

#### Academic Evaluation Activities

As Reviewer in International Journals

- Applied Physiology, Nutrition, and Metabolism (3)
- European Journal of Applied Physiology (5)
- Journal of Strength and Conditioning Research (2)
- Medicine and Science in Sports and Exercise (2)
- Muscle & Nerve (2)
- Journal of Neurophysiology (1)
- Journal of Sport Science (4)
- Heliyon (2)

### Professional membership

- European College of Sport Science, Member, 2009-2015 (International)
- American College of Sport Medicine, Member, 2011-2015 (International)
- Canadian Society of Exercise Physiology, Member, 2014-now (International)