SangHoon (Andrew) Yoon, *BSc*, *MSc*

PERSONAL INFORMATION

Position: *PhD student* at Auckland University of Technology

E-mail: sanghoon.yoon@autuni.ac.nz
Website: SangHoon Yoon
ORCID ID: 0000-0002-6654-7135
ResearchGate: SangHoon Yoon
Twitter: @SH_Andrew_Yoon

Peer-reviewed journal publications: 6

Research interests: cellular mechanisms of skeletal muscle fatigue (particularly high-intensity exercise), biomechanics and motor control of repetitive tasks (occupational work, exercise & sports), sex differences in neuromuscular fatigue mechanisms

I. PREVIOUS POSITIONS

Dec 2021 – July 2022	***Project administrator*** Sylvan Adams Sports Science Institute, McGill University, Montreal, Canada
May 2021 – Aug 2022	***Research assistant*** Biomechanics of Occupation and Sport Laboratory, McGill University, Montreal, Canada
Feb 2020 – Apr 2020	***Research assistant*** Institut National du Sport du Québec, Montreal, Canada
Sept 2019 – Dec 2019	***Research assistant*** Biomechanics of Occupation and Sport Laboratory, McGill University, Montreal, Canada

II. EDUCATION

Oct 2022 – TBD	***Ph.D. Sport and Exercise Science*** Health and Environmental Sciences Auckland University of Technology, Auckland, New Zealand
Jan 2020 – Aug 2021	***M.Sc. Biomechanics and Neuroscience*** Department of Kinesiology McGill University, Montreal, Quebec, Canada

Sept 2015 – Apr 2019	***B.Sc. Kinesiology (Honours)*** Department of Kinesiology McGill University, Montreal, Quebec, Canada
July 2018 – Nov 2018	***Education Abroad*** School of Human Movement and Nutrition Sciences University of Queensland, Brisbane, Queensland, Australia

III. AWARDS ($CAD)

Oct 2022 – Sep 2025	**Auckland University of Technology Doctoral Scholarships** Auckland University of Technology Value: $60,000.00 + tuition/fees ($17,000.00) *Due to holding another full PhD Scholarship (i.e., NSERC below), the scholarship value was reduced to $28,500.00 + tuition/fees ($17,000.00).*
May 2022 – Apr 2025	**Postgraduate Scholarships – Doctoral Program** Natural Science and Engineering Research Council of Canada (NSERC) Value: $63,000.00
May 2022 – Apr 2025	**Canada Graduate Scholarships – Doctoral Program (Declined)** Natural Science and Engineering Research Council of Canada (NSERC) Value: $105,000.00 *Offered to the highest-scored Postgraduate Scholarships-Doctoral (PGS-D) Program applicants. However, since it is only tenable at a Canadian institution, this scholarship was declined and PGS-D was accepted to pursue doctoral studies abroad (i.e., Auckland University of Technology).*
Apr 2021	**PGSS Travel Award** McGill University Value: $160.00
Nov 2020	**R. E. Wilkinson Award** McGill University Value: $800.00
May 2020 – Apr 2021	**Canada Graduate Scholarships – Master's Program** Natural Science and Engineering Research Council of Canada (NSERC) Value: $17,500.00
Jan 2020	**Graduate Excellence Award** McGill University

Value: $5,500.00

May 2019 – Aug 2019 **Undergraduate Student Research Award**
Natural Science and Engineering Research Council of Canada (NSERC)
Value: $5,625

May 2017 – Aug 2017 **Adriano Tassone Internship Award**
McGill University
Value: $4,000.00

IV. MENTORING

Date	Position	Name	Title
May 2021 – Aug 2022	Summer Internship/ Research Practicum/ Honours	Lauren Cederbaum	Sex-specific lower limb muscle activity coordination during high-intensity exercise
Sept 2020 – Dec 2020	Research Practicum	Luke Spagnuolo	Sex differences in muscle fatigue during the reverse motion of a repetitive pointing task
May 2020 – Aug 2020	Summer Internship	Shayan Kerr	Sex-specific effects of repetitive motion-induced neck/shoulder fatigue on muscle deoxygenation and perceived exertion

V. PUBLISHED RESEARCH CONTRIBUTIONS

a. Peer-reviewed Scientific Journal Publications (published, in press, accepted)

1. Lamanuzzi, S., Gill, G., **Yoon, S.**, Renda, E., Côté, J.N. (2022). Effects of anti-fatigue lenses on performance, muscle activity and subjective discomfort responses during a seated computer task. https://doi.org/10.1016/j.apergo.2023.103964
2. **Yoon, S.**, Bailey, C. A., Côté, J. N. (2022). Sex-specific muscle activation and oxygenation kinetics during a repetitive forward pointing task. *Applied Physiology, Nutrition, and Metabolism.*0, 1-15. https://doi.org/10.1139/apnm-2021-0664
3. **Yoon, S.**, Lefrançois-Daignault, T., Côté, J. N. (2021). The effect of cycling while typing on patterns of upper body muscle activation. *Human Factors*, 0, 1-15. https://doi.org/10.1177/00187208211022147
4. **Yoon, S.**, Bailey, C. A., Cohen, N. R., Côté, J. N. (2021). Changes in muscle activation, oxygenation, and morphology following a fatiguing repetitive forward reaching task in young adult males and females. *Journal of Electromyography and Kinesiology*, 59, 102564. https://doi.org/10.1016/j.jelekin.2021.102564
5. Bailey, C.A., **Yoon, S.**, Côté, J. N. (2021). Relative variability in muscle activation amplitude, muscle oxygenation, and muscle thickness: Changes with dynamic low-load elbow flexion fatigue and relationships in young and older females. *Journal of*

Electromyography and Kinesiology, 59, 102553. https://doi.org/10.1016/j.jelekin.2021.102553

6. **Yoon, S.**, Lefrançois-Daignault, T., Côté, J. N. (2019). Effects of cycling while typing on upper limb and performance characteristics. *Applied Ergonomics*, 80, 161-167. https://doi.org/10.1016/j.apergo.2019.05.015

b. Manuscripts submitted and currently in review or in advanced stage of preparation

1. **Yoon, S.**, Cederbaum, L.A., Côté, J.N. (2022). Females show less decline in contractile function than males after repeated all-out cycling despite accounting for total mechanical work. Submitted to Journal of Applied Physiology.
2. Cederbaum, L.A., **Yoon, S.**, Côté, J.N. (2022). Sex-specific neuromuscular coordination strategies of the quadriceps during fatiguing repeated sprint exercise. Submitted to Journal of Electromyography and Kinesiology.
3. **Yoon, S.**, Bailey, C.A., Côté, J.N. (2022). Influence of biological sex on fatigue-related adjustments in muscle activation, oxygenation, and thickness in a repetitive elbow flexion task. In Preparation for submission to Journal of Electromyography and Kinesiology.
4. Usselman, C., Gibbs, J., Duncan, L., Côté, J.N., Saboune, J., **Yoon, S.**, Herrik, S. Kinesiology research as an interdisciplinary approach to address sex/gender issues of physical activity, exercise and health. In preparation for submission as an invited paper in special issue "Sex, Gender and Health", in International Journal of Environmental Research and Public Health.

c. Abstracts published in conference proceedings

1. **Yoon, S.**, Cederbaum, L.A., Côté, J.N. Central motor drive plateaus at similar sprint repetition in females and males during repeated bouts of all-out cycling. 2022 International Society of Electrophysiology and Kinesiology Congress, Québec City, Quebec, Canada, 2022. Declined.
2. **Yoon, S.**, Cederbaum, L.A., Côté, J.N. Does adjusting for mechanical work affect sex differences in peripheral and central fatigue during repeated sprints? Proceedings of the Canadian Society for Exercise Physiology Annual General Meeting – Zooming into the Future: Exercise Science in the Virtual Age. Virtual, 2021.
3. **Yoon, S.**, Bailey, C.A., Cohen, N., Côté, J.N. Changes in muscle activation, morphology, and oxygenation following a fatiguing forward repetitive pointing task in young adult males and females. Centre for Interdisciplinary Research in Rehabilitation of Greater Montreal Scientific Congress Proceedings of Catalyst of Innovation for Tomorrow's Rehabilitation, Montreal, Quebec, Canada, 2021.
4. **Yoon, S.**, Bailey, C.A., Cohen, N., Côté, J.N. Changes in muscle activation, morphology, and oxygenation following a fatiguing forward repetitive pointing task in young adult males and females. Proceedings of the 21st Biennial Meeting of the Canadian Society for Biomechanics. Montreal, Quebec, Canada, 2021.
5. Bailey, C.A., **Yoon, S.**, Côté, J.N. Effect of dynamic elbow flexion fatigue on muscle activation, oxygenation, and thickness in young adult males and females. Proceedings of the

21st Biennial Meeting of the Canadian Society for Biomechanics. Montreal, Quebec, Canada, 2021.

6. Bailey, C.A., **Yoon, S.**, Côté, J.N. Are changes in muscle activation variability related to muscle deoxygenation and swelling during elbow flexion fatigue in young adult males and females? Proceedings of the 21st Biennial Meeting of the Canadian Society for Biomechanics. Montreal, Quebec, Canada, 2021.

d. Non-published Conference Presentations

1. **Yoon, S**., Dick, T., Tucker, K. In vivo neuromotor and biomechanical variability of vastus lateralis and vastus medialis obliquus with submaximal contraction in people with no knee pain. Biomedical Science Research Skills & Research Project oral and poster presentation, Brisbane, Queensland, Australia, 2018.
2. **Yoon, S.**, Lefrançois-Daignault, T., Côté, J. N. Sex-specific effects of leg cycle ergometry on shoulder blood flow and sensitivity during computer work. 13th Annual Faculty of Science Undergraduate Research Conference, Montreal, Quebec, Canada, 2017.

VI. SCIENTIFIC MANUSCRIPT REVIEWS (# of reviews)

Clinical Oral Investigations (1); Scientific Reports – Nature (1); International Journal of Industrial Ergonomics (1)

VII. EXTRACURRICULAR ACTIVITIES

Oct 2022 – Present	**Unified sport coach** Special Olympics Greenhithe, New Zealand
Dec 2018 – Dec 2021	**Program coordinator / Unified sport coach** Special Olympics Quebec, Montreal, Canada
Sept 2016 – Apr 2018	**Director of events** 5 Days for the Homeless, McGill University, Montreal, Canada
Sept 2016 – Apr 2018	**President** McGill MMA and BJJ Club, McGill University, Montreal, Canada