

# Curriculum Vitae

**Justin W. Andrushko, M.Sc., Ph.D.**

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## Academic Employment

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- September 2023 - present    **Assistant Professor**  
Department of Sport, Exercise and Rehabilitation  
Northumbria University – Newcastle upon Tyne, UK
- September 2023 - present    **Vice-Chancellor Fellow**  
Department of Sport, Exercise and Rehabilitation  
Northumbria University – Newcastle upon Tyne, UK
- September 2021 –  
October 2023                **Postdoctoral Research Fellow**  
Brain Behaviour Laboratory  
Faculty of Medicine, Department of Physical Therapy  
University of British Columbia – Vancouver B.C.  
Supervisor: Professor Lara Boyd

## Education

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- 2021                            **Doctor of Philosophy – Kinesiology**  
University of Saskatchewan – Saskatoon, SK.  
Supervisor: Professor Jonathan Farthing  
Thesis: Neural correlates of upper limb unimanual motor practice
- 2017                            **Master of Science – Kinesiology**  
University of Saskatchewan – Saskatoon, SK.  
Supervisor: Professor Jonathan Farthing  
Thesis: Specificity of sparing effects with cross-education after eccentric training
- 2014                            **Bachelor of Arts – Major in Sport, Health & Physical Education**  
Vancouver Island University – Nanaimo B.C.

## Select published Manuscripts (22 refereed, 5 preprinted or submitted in total)

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1. **Andrushko, J. W.**, Rinat, S., Kirby, E. D., Dahlby, J., Ekstrand, C., & Boyd, L. A. (2023). Females exhibit smaller volumes of brain activation and lower inter-subject variability during motor tasks. *Scientific Reports*. 13, 27698. <https://doi.org/10.1038/s41598-023-44871-4>
2. **Andrushko, J. W.**, Carr, J. C., Farthing, J. P., Lepley, L. K., DeFreitas, J., Goodall, S., Hendy, A. M., Howatson, G., Grooms, D. R., Zult, T., Hortobágyi, T., Harput, G., Papandreou, M. G., Nosaka, K., Carson, R. G., Manca, A., Deriu, F., Behm, D. G., Kidgell, D. J., & Clark, N. C., & Boyd, L. A. (2023). The potential role of cross-education in early-stage rehabilitation after anterior cruciate ligament reconstruction. Editorial, *British Journal of Sports Medicine*. <http://dx.doi.org/10.1136/bjsports-2023-107456>
3. Voskuil, C. C., **Andrushko, J. W.**, Huddleston, B. S., Farthing, J. P., & Carr, J. C. (2023). Exercise prescription and strategies to promote the cross-education of strength: A scoping review. *Applied Physiology, Nutrition and Metabolism*. 48(8), 569-582. <https://doi.org/10.1139/apnm-2023-0041>
4. **Andrushko, J. W.**, Levenstein, J. M., Zich, C., Edmond, E., Campbell, J., Clarke, W. T., Emir, U., Farthing, J. P., & Stagg, C. J. (2023). Repeated unilateral handgrip contractions alter functional

connectivity and improve contralateral limb response times. *Scientific Reports*. 13, 6437.

<https://doi.org/10.1038/s41598-023-33106-1>

5. **Andrushko, J. W.**, Gould, L., Renshaw, D. W., Forrester, S., Kelly, M. E., Linassi, G., Mickleborough, M., Oates, A., Hunter, G., Borowsky, R., & Farthing, J. P. (2022). Ipsilesional motor cortex activation with high force unimanual handgrip contractions with the less-affected limb in participants with stroke. *Neuroscience*. 483, 82-84.  
<https://doi.org/10.1016/j.neuroscience.2021.12.011>
6. Farthing, J. P., Zehr, E. P., Hendy, A. M., **Andrushko, J. W.**, Manca, A., Deriu, F., Loenneke, J., Minetto, M. A., & Hortobágyi, T. (2021). Cross-education: Is it a viable method for rehabilitation? *Brazilian Journal of Motor Behavior*. 15(1), 1-4. <https://doi.org/10.20338/bjmb.v15i1.215>
7. **Andrushko, J. W.**, Gould, L., Renshaw, D. W., Ekstrand, C., Hortobágyi, T., Borowsky, R., & Farthing, J. P. (2021). High force unimanual handgrip contractions increase ipsilateral sensorimotor activation and functional connectivity. *Neuroscience*, 452(C), 111-125.  
<https://doi.org/10.1016/j.neuroscience.2020.10.031>
8. Corradi, E. F. F., Lanza, M. B., Lacerda, L. T., **Andrushko, J. W.**, Martins-Costa, H. C., Diniz, R. C. R., Lima, F. V., & Chagas, M. H. (2021). Acute physiological responses with varying load or time under tension during a squat exercise: A randomized cross-over design. *Journal of Science and Medicine in Sport*, 24(2), 171-176. <https://doi.org/10.1016/j.jsams.2020.07.015>
9. **Andrushko, J. W.**, Gould, L., & Farthing, J. P. (2018). Contralateral effects of unilateral training: sparing of muscle strength and size after immobilization. *Applied Physiology, Nutrition, and Metabolism*, 43(11), 1131-1139. *Nervous System and Exercise Special Edition, Invited Review*.  
<https://doi.org/10.1139/apnm-2018-0073>
10. **Andrushko, J. W.**, Lanovaz, J. L., Björkman, K. M., Kontulainen, S. A., & Farthing, J. P. (2018). Unilateral strength training leads to muscle-specific sparing effects during opposite homologous limb immobilization. *Journal of Applied Physiology*, 124(4), 866-876.  
<https://doi.org/10.1152/jappphysiol.00971.2017>  
**APSselect Award:** The American Physiological Society. Volume 5, Issue 2, February 2018

### Select Invited Talks (13 invited talks in total)

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1. **Cross-education: A method to offset strength attenuation during unilateral injuries**  
Grand Rounds presentation with the School of Health and Rehabilitation Sciences in partnership with the Chronic Brain Injury Program – The Ohio State University, February 16<sup>th</sup>, 2023  
Columbus Ohio, USA
2. **The utility of cross-education for improving recovery from unilateral injury**  
The College of Health Sciences and Professions – Ohio University, February 15<sup>th</sup>, 2023  
Athens Ohio, USA
3. **Unilateral strength training leads to muscle-specific sparing effects during opposite homologous limb immobilization: Clinical implications**  
Saskatchewan Kinesiology and Exercise Science Association & Canadian Society for Exercise Physiology Education Day, February 1<sup>st</sup>, 2020  
Saskatoon, SK, Canada
4. **Cross-education: Motor training & brain plasticity – Future directions**  
University of Oxford, April 11<sup>th</sup>, 2018  
Oxford, UK.