Sasha Reschechtko, Ph.D. **June 2019**
BrainsCAN Postdoctoral Associate
Department of Physiology & Pharmacology
University of Western Ontario
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Education

2018	Ph.D.	The Pennsylvania State University	Kinesiology
2015	M.S.	The Pennsylvania State University	Kinesiology
2011	B.A.	The University of Chicago	Philosophy

Professional Appointments

2018 – Present	Postdoctoral Associate	Department of Physiology & Pharmacology, University of Western Ontario
2013 – 2018	Graduate Research Assistant	Department of Kinesiology The Pennsylvania State University
2012 – 2013	Research Assistant	Department of Physical Therapy University of Illinois at Chicago

Honors and Awards

2018 – Present	BrainsCAN Postdoctoral Associate, University of Western Ontario
2017	Trainee Professional Development Award Winner, Society for Neuroscience
2017	Best Poster Award Winner, Progress in Motor Control XI
2013	Joseph and Jean Britton Distinguished Graduate Fellow, The Pennsylvania State University

Research Funding

2018-2020 Canada First Research Excellence Funds (CFREF) BrainsCAN Postdoctoral Fellowship Program
PI: Sasha Reschechtko
"Central determinants of recovery from peripheral nerve injury"
Total: $116,000

2018 Natural Sciences and Engineering Research Council Engage Grant
PI: J. Andrew Pruszynski, Co-PI: Scott Selbie, collaborator: Sasha Reschechtko
Total: $25,000

Invited Presentations

Human Neuromechanics Laboratory, University of Florida, Gainesville, USA (2017). "A few takes on multi-finger action."

The Action Club, The Pennsylvania State University, University Park, USA (2017). "What do we control when we control our hands?"

Sensorimotor Superlab, University of Western Ontario, London, Canada (2017). "Parsing multi-finger action."

Peer-Reviewed Journal Articles

Reschechtko S, Johansson AS, Pruszynski JA. Maintaining arm control during self-triggered and unpredictable unloading perturbations. *European Journal of Neuroscience* (In Press). 2019.

Reschechtko S, Wang H, Alendry K, Benson C, Hahn B, Zhang W. Effect of Sensory Deprivation on Maximal Force Abilities from Local to Non-local Digits. *Journal of Motor Behavior* (In Press). 2019.

Reschechtko S, Latash M. "Stability of Hand Force Production: II. Synergies at the Level of Finger Control Variables." *Journal of Neurophysiology* 120: 1045-1060. 2019.

Reschechtko S, Cuadra CJ, Latash ML. "Force Illusions and Drifts Induced by Muscle Vibration." *Journal of Neurophysiology* 119: 326-336. 2018.

Mehler DMA, **Reschechtko S**. "Movement Variability is Predicted Bilaterally by Inferior Parietal Lobule." (Review) *Journal of Neuroscience* 38: 2413-2415. 2018.

Cuadra CJ, Bartsch A, Tiemann P, **Reschechtko S**, Latash ML. "Multi-finger synergies and the muscular apparatus of the hand." *Experimental Brain Research* 236: 1383-1393. 2018.

Hasanbarani F, **Reschechtko S**, Latash ML. "Performance Drifts in Two-Finger Cyclical Force Production Tasks Performed by One and Two Actors." *Experimental Brain Research* 236: 779-794. 2018.

Reschechtko S, Latash ML. "Stability of Hand Force Production: I. Control Variables at the Hand Level." *Journal of Neurophysiology* 118: 3152-3164. 2017.

Reschechtko S, Hasanbarani F, Akulin VM, Latash ML. "Unintentional changes in cyclical force production by an abundant system: Empirical observations and a dynamical model." *Neuroscience* 350: 94-109. 2017.

Liu X, **Reschechtko S**, Wang S, Pai Y-C. "The recovery response to a novel unannounced laboratory-induced slip: the 'first trial effect' in older adults." *Clinical Biomechanics* 48: 9-14. 2017

Reschechtko S, Zatsiorsky VM, Latash ML. "The Synergic Control of Multi-Finger Force Production: Synergies Stabilizing Explicit and Implicit Task Components." *Experimental Brain Research* 235: 1-14. 2017.

Solnik S, **Reschechtko S**, Wu Y-H, Zatsiorsky VM, Latash ML. "Interpersonal synergies: static prehension tasks performed by two actors." *Experimental Brain Research* 234: 2267-2282. 2016.

Solnik S, **Reschechtko S**, Wu Y-H, Zatsiorsky VM, Latash ML. "Force-Stabilizing Synergies in Motor Tasks Involving Two Actors." *Experimental Brain Research* 233: 2935-2949. 2015.

Reschechtko S, Zatsiorsky VM, Latash ML. "Task-Specific Stability of Multi-Finger Steady-State Action." *Journal of Motor Behavior* 47: 365-377. 2015.

Reschechtko S, Zatsiorsky VM, Latash ML. "Stability of multi-finger action in different state spaces." *Journal of Neurophysiology* 112: 3209-3218. 2014.

Conference Abstracts and Presentations

Reschechtko S, Johansson AS, Pruszynski JA. Maintaining arm control during self-triggered and unpredictable unloading perturbations. 29th Annual Meeting of the Society for Neural Control of Movement. Toyama, Japan: April 2019.

Zhang W, **Reschechtko S**, Wang H, Alendry K, Benson C, Hahn B. Interactive effect of somatosensory and visual feedback on force production and coordination during isometric pressing tasks. Progress in Clinical Motor Control: Neurorehabilitation I. University Park, USA: July 2018.

Reschechtko S, Latash ML. Hierarchical organization of force and moment stabilizing synergies in the space of theoretical control variables. Society for Neuroscience, Washington, DC, USA: November 2017.

Cuadra CJ, **Reschechtko S**, Latash ML. Force illusions caused by muscle vibration. Society for Neuroscience, Washington, DC, USA: November 2017.

Reschechtko S, Latash ML. Force stabilizing synergies in spaces of theoretical control variables: Effects of visual feedback. Progress in Motor Control XI, Miami, USA: July 2017.

Reschechtko S, Wang H, Alendry K, Benson C, Hahn B, Zhang W. Absent somatosensory feedback decreases maximal force abilities in isometric pressing tasks. Progress in Motor Control XI, Miami, USA: July 2017.

Reschechtko S. Unintentional Force Changes in Cyclical Tasks Performed by an Abundant System. Penn State Graduate Exhibition, University Park, USA: March 2017.

Reschechtko S, Ambike S, Quao M, Solnik S, Zhou T, Latash M. Violations of equifinality under transient perturbations: The back-coupling hypothesis. Society for Neuroscience, Washington, DC, USA: November 2014.

Mattos D, **Reschechtko S**, Zhou T, Zatsiorsky V, Latash M. Motor Equivalence in Actions by Redundant Motor Systems. Society for Neuroscience, Washington, DC, USA: November 2014.

Solnik S, Ambike S, Wu Y-H, **Reschechtko S**, Latash M. Performance-stabilizing Synergies in Motor Tasks Involving Two Actors. Society for Neuroscience, Washington, DC, USA: November 2014.

Teaching

University of Western Ontario

2018 Phys Pharm 3000E: Physiology & Pharmacology Laboratory
Faculty Supervisor

The Pennsylvania State University

2014 – 2018 KINES 360: The Neurobiology of Motor Control and Development
Teaching Assistant

2015 – 2017 KINES 384: Biomechanics
Teaching Assistant (Laboratory)

2015, 2018 KINES 460: Movement Disorders
Guest Lecturer

Review Activities

Ad Hoc Reviewer: *Journal of Neurophysiology*
Ad Hoc Reviewer: *Experimental Brain Research*

Memberships in Professional Societies

2013 – Present Society for Neuroscience
2017 – Present International Society of Motor Control
2017 – Present American Physiological Society
2018 – Present Society for the Neural Control of Movement