

## Curriculum Vitae

# David McArthur (né Gonzalez), Ph.D., R. Kin (Retired)

Department of Kinesiology  
Dalhousie University  
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## EDUCATION

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- 2006-2010      Doctor of Philosophy- Neuroscience (PhD)  
McMaster University, Hamilton, ON, Canada  
Advisor: Dr. Jim Lyons  
Dissertation: *The influence of Direct Action Possibilities on Movement in Individuals with Autism Spectrum Disorder.*
- 2004-2006      Master of Science (Kinesiology)- Motor Control (MSc.)  
University of Waterloo, Waterloo, ON, Canada  
Advisor: Dr. Heather Carnahan  
Thesis: *The Use of Auditory Cues in Anticipatory Control of Grasping Forces.*
- 1999-2004      Bachelor of Kinesiology- Honours (BSc.)  
University of Waterloo, Waterloo, ON, Canada  
Advisor: Dr. Heather Carnahan  
Honours Project: *Control of laparoscopic instrument motion in an inanimate bench model: Implications for the training and evaluation of technical skills.*

## POSITIONS HELD

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2021-Present	Instructor	Kinesiology, Dalhousie University
2019- Present	Research Consultant	Myoworx Physiotherapy
2019- 2020	Registered Kinesiologist	Myoworx Physiotherapy
2017- 2018	Research Consultant	Key Rehab Services Inc
2011- 2016	Post-Doctoral Fellow (Dr. Eric Roy)	Neurobehavioural Assessment Lab

## TEACHING ACTIVITIES

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### DALHOUSIE UNIVERSITY

#### School of Health and Human Performance

- Winter  
(2021- online)      KINE 3430: Skill Acquisition
- Role: Professor
- (2022- in person)      • 3<sup>rd</sup> year Undergraduate course
- Enrollment- ~30-40 students
- Winter  
(2022- online)      KINE 2430: Motor Control and Learning
- Role: Professor
- (2023- in person)      • 2<sup>nd</sup> year Undergraduate course
- Enrollment- ~100-130 students

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| Fall<br>(2021) | PHYT/OCCU 6140: Neuroscience <ul style="list-style-type: none"> <li>• Role: Co-Instructor</li> <li>• 1<sup>st</sup> year Graduate course</li> <li>• Enrollment- 120 students</li> </ul> |
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**WILFRID LAURIER UNIVERSITY**  
Kinesiology and Physical Education

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| Winter<br>(2017) | KP 323: Human Growth & Motor Development <ul style="list-style-type: none"> <li>• Role: Professor</li> <li>• 3<sup>rd</sup> year Undergraduate course</li> <li>• Enrollment- 114 students</li> </ul> |
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**UNIVERSITY OF WATERLOO**  
Department of Kinesiology

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| Winter<br>(2016, 2017) | KIN 493: Clinical Kinesiology: Movement Assessment Practicum <ul style="list-style-type: none"> <li>• Role: Professor</li> <li>• 4<sup>th</sup> year Undergraduate course</li> <li>• Enrollment- 6 students</li> </ul>   |
| Winter<br>(2015, 2016) | KIN 457: Cognitive, Perceptual and Motor Assessment <ul style="list-style-type: none"> <li>• Role: Co-taught course and developed course material</li> <li>• 4<sup>th</sup> year Undergraduate course</li> <li>• Enrollment- 12 students</li> </ul>            |
| Fall<br>(2013-2016)    | KIN 456: Cognitive Dysfunction and Motor Skill <ul style="list-style-type: none"> <li>• Role: Guest lecturer and developed unit on cognitive motor disorders</li> <li>• 4<sup>th</sup> year Undergraduate course</li> <li>• Enrollment- 40 students</li> </ul> |
| Fall<br>(2013, 2014)   | KIN 357: Motor Learning <ul style="list-style-type: none"> <li>• Role: Guest lecturer and helped develop examination material</li> <li>• 3<sup>rd</sup> year Undergraduate course</li> <li>• Enrollment- 40 students</li> </ul>                                |
| Winter<br>2006         | KIN 264: Motor Development <ul style="list-style-type: none"> <li>• Role: Guest lecturer unit on specificity of learning</li> <li>• 2<sup>nd</sup> year Undergraduate course</li> <li>• Enrollment- 40 students</li> </ul>                                     |
| Fall<br>2005           | KIN 255: Introduction to Psychomotor Behaviour <ul style="list-style-type: none"> <li>• Role: Guest lecturer on applications of motor control</li> <li>• 1<sup>st</sup> year Undergraduate course</li> <li>• Enrollment- 110 students</li> </ul>               |

**UNIVERSITY OF TORONTO**Department of Occupational Therapy

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| Winter<br>2014 | OCT 1172Y: Neuro   |
|                | <ul style="list-style-type: none"><li>• Role: Guest lecturer on motor learning principles applied to neurological population</li><li>• 1<sup>st</sup> year Master course</li><li>• Enrollment- 80 students</li></ul> |

**UNIVERSITY OF ONTARIO INSTITUTE OF TECHNOLOGY**Faculty of Health Sciences

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| Fall<br>2012 | HLSC 3410U: Human Motor Control and Learning  |
|              | <ul style="list-style-type: none"><li>• Role: Guest lecturer on my research</li><li>• 3rd year Undergraduate course</li><li>• Enrollment- 60 students</li></ul> |

**MCMMASTER UNIVERSITY**Department of Kinesiology

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| Winter<br>2012 | KIN 3C03: Kinesiology Statistics and Research Design   |
|                | <ul style="list-style-type: none"><li>• Role: Co-taught course and developed course content and examination material</li><li>• 3rd year Undergraduate course</li><li>• Enrollment- 47 students</li><li>• Took over instructor responsibilities</li></ul> |
| Winter<br>2009 | KIN 3E03: Neural Control of Movement   |
|                | <ul style="list-style-type: none"><li>• Role: Guest lecturer on cells of nervous system and help develop examination material</li><li>• 3rd year Undergraduate course</li><li>• Enrollment- 74 students</li></ul>  |

**TEACHING DEVELOPMENT COURSES**

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**Dalhousie University**

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| 2022 - Present | Faculty Certificate in Teaching in Learning  |
| Winter 2022    | Copyright  |
| Winter 2022    | Holistic Approach  |
| Summer 2022    | Creating a Teaching Dossier  |
| Fall 2022      | Teaching International Students: Making Learning Experience Relevant and Inclusive |

**University of Waterloo**

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| Fall 2013 | Teaching Development Series (Certificate) |
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## UNIVERSITY AND COMMUNITY SERVICE

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### Dalhousie University

Start	End	Position
2021	Present	Member/Chair HAHP Hiring Committee
2021	Present	HAHP Lab Support and Operations
2021	Present	Thesis Committee ( <i>Liam Pellerine</i> )
2021	Present	Curriculum Review Member
2022	Present	Defense Chair ( <i>various</i> )
2022	2023	Health Administration Hiring Committee Member
2021	2022	Space Allocation Committee Member

### Community

Start	End	Position
2023	Present	KANS Board Member
2013	2019	Waterloo Concussion Safety Program Lead
2017	2019	Kitchener Rangers Concussion Specialist
2016	2017	Kitchener Victoria Park Board of Directors
2014	2014	Reviewer for Prestigious Award (SCAPPS Young Scientist Award)
2014	2014	Moderator for Practice, Learning Effects and End State Comfort Session (SCAPPS)
2010	2010	Southern Ontario Motor Behaviour Symposium Conference Organizer <sup>2</sup>
2009	2010	Committee Member on Graduate Curriculum, Policy, Admissions, and Study Composition
2009	2010	Kinesiology Graduate Body- Heimbecker Representative

## SCHOLARLY WORK

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*Career total: 36, 9 first author*

### Refereed Journal Publications (Published, In-Press, or Accepted = 35):

\* Underlined names represent students supervised or co-supervised

1. Passmore, S.R., Malone, Q., MacNeil, B, Sanli, E. & **Gonzalez, D.** (2022). Differing characteristics of human-shaped visual stimuli affect clinicians' dosage of a spinal manipulative thrust on a low-fidelity model: A cross-sectional study. *Journal of Manipulative and Physiological Therapeutics*, In press.
2. Tapper, A. **Gonzalez, D.**, Nouredanesh, M., & Niwechwiej-Szwedo, E. (2021). Pupillometry provides a psychophysiological index of arousal level and cognitive effort during the performance of a visual-auditory dual-task in individuals with a history of concussion. *Vision Research*, VR-20-329R2.
3. Tugac, N., **Gonzalez, D.**, Noguchi, K., & Niechwiej-Szwedo, E. (2019). The role of somatosensory input in target localization during binocular and monocular viewing while performing a high precision reaching and placement task. *Experiment Eye Research*, 183, 76-83.
4. Lulic, T., Maciukiewicz, J.M., **Gonzalez, D.A.**, Roy, E.A., & Dickerson, C.R. (2018). The effect of aging and contextual information on manual asymmetry in tool use. *Experimental Brain Research*, 236(8), 2347-2362.

5. Niechwiej-Szwedo, E., **Gonzalez, D.**, Nouredanesh, M., & Tung, J. (2018). Evaluation of the LEAP motion controller during the performance of visually-guided upper limb movements. *PLoS one*, 13(3): e0193639.
6. Niechwiej-Szwedo, E., Tapper, A., **Gonzalez, D.**, Bradley, R., & Duncan, R. (2018). Saccade latency delays in young apolipoprotein E (APOE E) epsilon 4 carriers. *Behavioural Brain Research*, 353, 91-97.
7. **Gonzalez, D.A.**, Scharoun, S.M., Cinelli, S.M., Bryden, P.J., Lyons, J.L., & Roy, E.A. (2018). Object-Tool-Actor interaction: Object information drives intended action. *Journal of Motor Behavior*, 50(1), 80-95.
8. Scharoun, S.M., **Gonzalez, D.A.**, Roy, E.A., & Bryden, P.J. (2018). End-state comfort across the lifespan: A cross-sectional investigation of how movement context influences motor planning in an overturned glass task. *Motor Control*, 22(2), 211-230.
9. Martin, L., Tapper, A., **Gonzalez, D.A.**, Leclerc, M., & Niechwiej-Szwedo, E. (2017). The effects of task-relevant saccadic eye movements performed during the encoding of a serial sequence on visuospatial memory performance. *Experimental Brain Research*, 235(5), 1519-1529.
10. Scharoun, S.M., Mintz, A., Glazebrook, C.M., Roy, E.A., & **Gonzalez, D.A.** (2017). How working with a helpful versus less helpful confederate influences joint-action in a pegboard task. *Journal of Motor Behavior*, 49(6), 619-628.
11. Tapper, A., **Gonzalez, D.A.**, Roy, E.A., & Niechwiej-Szwedo, E. (2017). Executive function deficits in team sport athletes with a history of concussion revealed by a visual-auditory dual task paradigm. *Journal of Sports Sciences*, 35(3), 231-240.
12. **Gonzalez, D.A.** & Niechwiej-Szwedo, E. (2016). Binocular vision facilitates hand-eye coordination during sequential grasping and placing movements. *Vision Research*. VR-15-323.
13. Scharoun, S.M., Bryden, P.J., Cinelli, M.E., **Gonzalez, D.A.**, & Roy, E.A. (2016). Do children have the same capacity to perceive affordances as adults? An investigation of tool selection and use. *Journal of Motor Learning and Development*, 4(1), 59-79.
14. McArthur, C., **Gonzalez, D.A.**, Roy, E.A., & Giangregorio, L. (2016). What are the circumstances of fall and fracture in long-term care? *Canadian Journal on Aging*, 35(4), 491-498.
15. Scharoun, S.M., **Gonzalez, D.A.**, Bryden, P.J., & Roy, E.A. (2016). The influence of action execution on end-state comfort and underlying movement kinematics: An examination of right and left handed participants. *Acta Psychologica*, 164, 1-9.
16. Lee, T.D., Elias, K., **Gonzalez, D.**, Alguire, K., Ding, K., & Dhaliwal, C. (2016). On the role of error in motor learning. *Journal of Motor Behavior*, 48 (2), 99-115.
17. Scharoun, S.M., **Gonzalez, D.A.**, Bryden, P.J., & Roy, E.A. (2015). How the mode of action affects evidence of planning and movement kinematics in aging: End-state comfort in older adults. *Developmental Psychobiology*, 58, 439-449.
18. **Gonzalez, D.A.**, Glazebrook, C.M., & Lyons, J.L. (2015). The use of affordances and action phrases in individuals with Autism Spectrum Disorders. *Neuropsychologia*.
19. Tung, J.Y., Lulic, T., **Gonzalez, D.A.**, Tran, J., Dickerson, C., & Roy, E.A. (2015). Evaluation of a portable markerless finger position capture device: Accuracy of the Leap Motion controller in healthy adults. *Physiological Measurement*, 36, 1025-1035.
20. Kim, J.J., **Gonzalez, D.A.**, Mintz, A., Roy, E.A., & Tung, J.Y. (2015). Motor Control Assessment using Leap Motion: Filtering Methods and Performance in Indoor and Outdoor Environments. *IFMBE Proceedings, Springer, 2015*.

21. Siva, M., **Gonzalez, D.A.**, Bryden, P.J., Young, G., Forsyth, A., & Roy, E.A. (2015). Handedness throughout the lifespan: Cross-sectional view on sex differences. *Frontiers Human Neuroscience*. 5.
22. Gnanaseelan, R., **Gonzalez, D.A.**, & Niechwiej-Szwedo, E. (2014). Binocular advantage for prehension movements performed in visually enriched environments requiring visual search. *Frontiers in Human Neuroscience*. 8:959. doi: 10.3389/fnhum.2014.00959
23. Hansen, S., **Gonzalez, D.A.**, & Lyons, J.L. (2013). Separating responses on demand characteristics and phenomenological-spatial associations 1, 2. *Perceptual & Motor Skills*, 117 (2), 578-596.
24. **Gonzalez, D.A.**, Glazebrook, C.M., Studenka, B., & Lyons, J.L. (2013). Motor interactions with another person: Do individuals with Autism Spectrum Disorder plan ahead? *Frontiers in Integrative Neuroscience*, 7:23, doi: 10.3389/fnint.2013.00023
25. **Gonzalez, D.A.**, Kegel, S., Ishikura, T., & Lee, T.D. (2012). Effects of vision on head-putter coordination in golf. *Motor Control*, 16, 371-385.
26. **Gonzalez, D.A.**, Studenka, B., Glazebrook, C.M., & Lyons, J.L. (2011). Extending end-state comfort effect: Do we consider the beginning state comfort of another? *Acta Psychologica*, 136, 347-353.
27. **Gonzalez, D.A.**, Dubrowski, A., & Carnahan, H. (2010). The use of auditory cues in anticipatory control of grasping forces. *Motor Control*, 14 (2), 255-264.
28. Sonnadara, R., **Gonzalez, D.A.**, Hansen, S., Elliot, D., & Lyons, J. (2009). Spatial properties of perceived pitch: influence on reaching movements. *Annals of the New York Academy of Sciences*, 1169, 503-507.
29. Glazebrook, C.M., **Gonzalez, D.**, Hansen, S., & Elliott, D. (2009). The role of vision for online control of manual aiming movements in persons with autism. *Autism: International Journal of Research and Practice*, 13 (4), 411-433.
30. Lee, T.D., Ishikura, T., Kegel, S., **Gonzalez, D.**, & Passmore, S. (2008). Do expert golfers really keep their head still while putting? *International Journal of Sports Science & Coaching*, 3, 135-143.
31. Praamsma, M., Carnahan, H., Backstein, D., Veillette, C., **Gonzalez, D.**, & Dubrowski, A. (2008). Drilling sounds are used by surgeons and intermediate residents, but not novice orthopaedic trainees, to guide drilling motions. *Canadian Journal of Surgery*, 51 (6), 442-446.
32. Lee, T.D., Ishikura, T., Kegel, S., **Gonzalez, D.**, & Passmore, S. (2008). Head-putter coordination patterns in expert and less skilled golfers. *Journal of Motor Behavior*, 40 (4), 267-272.
33. **Gonzalez, D.**, Kowalski, K., Dubrowski, A., & Carnahan, H. (2007). Visual field magnification and touch perception when exploring surfaces with the index finger and a rigid instrument. *Human Factors*, 49 (4), 679-687.
34. **Gonzalez, D.**, Carnahan, H., Praamsma, M., & Dubrowski, A. (2007). Control of laparoscopic instrument motion in an inanimate bench model: implications for the training and evaluation of technical skills. *Journal of Applied Ergonomics*, 38 (2), 123-132.
35. Hung, C., Dubrowski, A., **Gonzalez, D.**, & Carnahan, H. (2007). Surface exploration using instruments: The perception of friction. *Studies in Health Technology and Informatics*, 125, 191-3.
36. **Gonzalez, D.**, Carnahan, H., Praamsma, M., MacRae, H., & Dubrowski, A. (2005). Control of laparoscopic instrument motion in an inanimate bench model: Implications for the training and evaluation of technical skills. *Studies in Health Technology and Informatics*, 111, 149-152.

### Book Chapters:

1. Roy, E.A., Black, S.E., Stamenova, V., Hebert, D., & **Gonzalez, D.** (2014). Limb apraxia: Types, neural correlates and implications for clinical assessment and function in daily living. In T.A. Schweizer & R.L. Macdonald, *The Behavioural Consequences of Stroke* (51-70). New York: Springer.

### Published Peer Reviewed Abstracts [Total = 19]

\* Underlined names represent students supervised or co-supervised

1. Al-Mfarej, D., **Gonzalez, D.**, & Tung, J. (May 2021). Sensor-based 9-week serial balance data show need for individualized baseline profiles: Implications on concussion diagnosis. Virtual Conference.
2. Niechwiej-Szwedo, E., & **Gonzalez, D.A.** (May 2016). Fixation stability during the performance of a high-precision manipulation task. VSS, St. Pete Beach, FL.
3. **Gonzalez, D.A.**, Burns, R.W., Ibey, R.J., Tapper, A., Tung, J.Y., & Roy, E.A. (May 2016). Multi-disciplinary approach to concussion diagnosis and recovery. CATA, Vancouver, BC. Journal of Athletic Training and Sport Health Care.
4. Scharoun, S.M., **Gonzalez, D.A.**, Roy, E.A., & Bryden, P.J. (June 2015). End-state comfort across the lifespan: A cross-sectional investigation of how the mode of action execution influences motor planning in an overturned glass task. NASPSPA, Portland, OR. (\***Outstanding Student Paper Award Recipient**).
5. **Gonzalez, D.A.**, & Niechwiej-Szwedo, E. (May 2015). Sequential Movements: When does Binocular Vision Facilitate Object Grasping and Placing. VSS, St. Pete Beach, FL.
6. Tapper, A., Niechwiej-Szwedo, E. **Gonzalez, D.A.**, & Roy, E.A. (May 2015). Working Memory Deficits in Dynamic Sport Athletes with a History of Concussion Revealed by A Visual-Auditory Dual-Task Paradigm. VSS, St. Pete Beach, FL.
7. Niechwiej-Szwedo, E., **Gonzalez, D.A.**, Tapper, A., Mardian, E., Roy E.A., Duncan, R. (May 2015). The BDNF Val66Met polymorphism is associated with improved performance on a visual-auditory working memory task in varsity athletes. VSS, St. Pete Beach, FL.
8. Alguire, K.S., Elias, K.L., Ke Ding, K., **Gonzalez, D.A.**, & Lee, T.D. (June 2014). Uncertainty in discovery motor-learning: The value in the errors we make. NASPSPA, Minneapolis, MN.
9. Forsyth, A. N., Gonzalez, D. A., Siva, M., Young, B. W., Roy, E. A., & Bryden, P. J. (2014). Handedness throughout the lifespan: Cross-sectional view on sex differences. NASPSPA, Minneapolis, MN.
10. Scharoun, S.M., Bryden, P.J., Cinelli, M.E., Hackney, A.L., **Gonzalez, D.A.**, & Roy, E.A. (June, 2012). Investigating the affordances of tool selection and tool use in typically developing children. NASPSPA, Honolulu, HI.
11. Burkitt, J.J., Staite, V., **Gonzalez, D.**, Lyons, J.L., & Elliott, D. (June 2011). Extending the performance-based findings associated with the availability of prior knowledge concerning online visual feedback availability to the learning a precision aiming movement. NASPSPA, Burlington, VT.
12. **Gonzalez, D.A.**, & Lyons, J. (June 2010). Social affordances could alleviate social interactions in individuals with autism spectrum disorder. NASPSPA, Tucson, AZ.

13. **Gonzalez, D.**, Rotteau, T., Sonnadara, R., Hansen, S., Burkitt, J., Gruevski, K., D'Amore, A., Lyons, J. (June 2008). Are you sure you heard that right? NASPSPA, Niagara Falls, ON.
14. Lee, T.D., Ishikura, T., Kegel, S., **Gonzalez, D.**, & Passmore, S. (June 2008). Coordination of head and putter movement in expert and less-skilled golfers. NASPSPA, Niagara Falls, ON.
15. **Gonzalez, D.**, Rotteau, T., & Lyons, J. (June 2007). Low and Away: Do spatial representations of tonal pitch height extend to the horizontal plane? NASPSPA, San Diego, CA.
16. Glazebrook, C.M., **Gonzalez, D.**, & Elliott, D. (June 2007). The role of vision for online control of aiming movements in persons with autism. NASPSPA, San Diego, CA.
17. Rotteau, T., **Gonzalez, D.**, & Lyons, J. (June 2007). Listen: Is your car trying to tell you something? NASPSPA, San Diego, CA.
18. Hung, C., Dubrowski, A., **Gonzalez, D.**, & Carnahan, H. (January 2007). Surface exploration using a surgical instrument: The perception of friction. Medicine Meets Virtual Reality 15, Long Beach, CA.
19. **Gonzalez, D.**, Carnahan, H., Praamsma, M., MacRae, H., & Dubrowski, A. (January 2005). Control of laparoscopic instrument motion in an inanimate bench model: Implications for the training and evaluation of technical skills. Medicine Meets Virtual Reality, Long Beach, CA.

#### CONFERENCE PROCEEDINGS [Total = 42]

1. Passmore, S.R., Malone, Q., MacNeil, B., Sanli, E., **Gonzalez, D.** (March 2020). Visual perception of patient attributes modulates spinal manipulation dose characteristics. ACCRAC, San Diego, California.
2. Passmore, S.R., Malone, Q., MacNeil, B., Sanli, E., **Gonzalez, D.** (October 2019). Visual perception modulates motor output of manual therapy thrust delivery. SCAPPS, Vancouver, BC.
3. Blake, C., **Gonzalez, D.A.**, McMahon, J., (November 2017). Mild traumatic brain injury biomarkers and testing methods for point-care assessment. Atlantic Corridor Research Conference. University College Cork (UCC). Cork, Ireland.
4. Niechwiej-Szwedo, E., & **Gonzalez, D.A.** (May 2016). Effects of abnormal binocular vision due to amblyopia and strabismus on the performance of a manipulation task involving precision grasping, and action sequence. ARVO, Seattle, WA.
5. **Gonzalez, D.A.**, Tapper, A., Niechwiej-Szwedo, E., Capobianco, A., & Roy, E.A. (October 2015). Long term consequences of concussion: Sensitivity and specificity measures of deficits in a dual task paradigm. SCAPPS, Edmonton, AB.
6. Scharoun, S. M., **Gonzalez, D. A.**, Roy, E. A., & Bryden, P. J. (October 2015) End-state comfort across the lifespan: A cross-sectional investigation of how the mode of action execution influences motor planning in an overturned glass task. **Invited presentation (as NASPSPA Outstanding Student Paper award recipient)**. SCAPPS, Edmonton, AB.
7. Niechwiej-Szwedo, E., **Gonzalez, D.**, Gnanaseelan, R., & Jennett, T. (November, 2014). Binocular advantage in prehension movements performed in visually stimulating environments. SFN, Washington, US.
8. Barnett, K., **Gonzalez, D.**, Capobianco, A., Scharoun, S., & Roy, E. (October, 2014). Soccer specific working memory task. SCAPPS, London, ON.
9. **Gonzalez, D.**, Capobianco, A., Ibey, R., Richardson, B., Roy, E. (October, 2014). Neurocognitive measures of visuospatial working memory performance. SCAPPS, London, ON.

10. Martin, L., Tapper, A., Gonzalez, D., Roy, E., & Niechwiej-Szwedo, E. (October, 2014). The role of eye movements in encoding spatial information. SCAPPS, London, ON.
11. Scharoun, S., Gonzalez, D., Bryden, P., & Roy, E. (October, 2014). The influence of action execution on end-state comfort: An examination of young and older adults. SCAPPS, London, ON.
12. Scherger, A., Gonzalez, D., Tung, J., Ibey, R., & Roy, E. (October, 2014). The influence of a weighted perturbation on a bimanual coordination task. SCAPPS, London, ON.
13. Forsyth, A., Gonzalez, D., Siva, M., Young, G., Roy, E., & Bryden, P. (October, 2014). Handedness throughout the lifespan: Cross-sectional view on sex differences. SCAPPS, London, ON.
14. Young, G., Bryden, P., Gonzalez, D., & Roy, E. (October, 2014). The effect of the 2D:4D ratio on right and left hand performance for two versions of the grooved pegboard task. SCAPPS, London, ON.
15. Mintz, A., Scharoun, S., Gonzalez, D., Glazebrook, C., & Roy, E. (October, 2014). Interpersonal movement coordination using a peg board task. SCAPPS, London, ON.
16. **Gonzalez, D.A.,** Tung, J.Y., Tran, J., Lulic, T., & Roy, E.A. (October, 2013). Capturing finger positional data using portable and inexpensive markerless systems. SCAPPS, Kelowna, BC.
17. Scharoun, S.M., Gonzalez, D.A., Bryden, P.J., & Roy, E.A. (October, 2013). Motor planning in a cup manipulation task: Does the task context influence end-state comfort? SCAPPS, Kelowna, BC.
18. Scharoun, S.M., Bryden, P.J., Cinelli, M.E., Hackney, A.L., **Gonzalez, D.A.,** & Roy, E.A. (October, 2013). The influence of affordances on hand selection in reaching in right-handed children and adults. SCAPPS, Kelowna, BC.
19. Niechwiej-Szwedo, E., Seelan, R., & Gonzalez, D. (October, 2013). Binocular advantage for decision making during a prehension task. SCAPPS, Kelowna, BC.
20. Glazebrook, C.M., **Gonzalez, D.A.,** & Lyons, J.L. (May, 2013). Interpersonal motor interactions: Do individuals with Autism Spectrum Disorder adjust? IMFAR, Donostia- San Sebastián, Spain.
21. **Gonzalez, D.A.,** Pagano, C., Draanen, L.V., Lyons, J.L., Cinelli, M., Bryden, P. & Roy, E. (November, 2012). How do we select the tools we use? SCAPPS, Halifax, N.S.
22. Lulic, T., Engelhardt, A., **Gonzalez, D.,** Roy, E., & Dickerson, C. (June, 2012). Bilateral three-dimensional analysis of dominant and non-dominant limb joint angles in activities of daily living. CSB-SCB, Vancouver, BC.
23. **Gonzalez, D.,** Gravely, M., Black, S., & Roy, E. (October, 2011). Why not away? Moving towards a better understanding of apraxia in stroke. SCAPPS, Winnipeg, MB.
24. Elias, K., **Gonzalez, D.,** Alguire, K., & Lee, T.D. (October, 2011). Amount of choice in discovery motor learning: A performance-learning paradox. SCAPPS, Winnipeg, MB.
25. Rose, R., Clark, A., J., **Gonzalez, D.A.,** & Roy, E. (October, 2011). Still making attentional errors: A modified slip induction task. SCAPPS, Winnipeg, MB.
26. Lulic, T., Sravanapudi, A., **Gonzalez, D.,** Dickerson, C., & Roy, E. (August, 2011). Bilateral three-dimensional wrist velocity during activities of daily living; Towards generating normative upper limb kinematic profiles. ASB, San Diego, CA.
27. **Gonzalez, D.A.,** Studenka, B., Glazebrook, C., & Lyons, J. (November 2010). Motoric interactions with another person: How do individuals with Autism Spectrum Disorder adjust? SCAPPS, Ottawa, ON.

28. Sonnadara, R.R., Hansen, S., **Gonzalez, D.**, Burkitt, J., & Lyons, J. (August 2010). Spatial properties of perceived pitch. ICMPC, Seattle, WA.
29. **Gonzalez, D.A.**, Kegel, S., Ishikura, T., & Lee, T.D. (November 2009). Improving head-putter coordination: Visual guidance on improving expertise. SCAPPS, Toronto, ON.
30. Tromp, E.J.Y., **Gonzalez, D.A.**, Allard, F., Mindra, S., & Lyons, J. (November 2009). Contextual interference during implicit learning. SCAPPS, Toronto, ON.
31. **Gonzalez, D.**, Rotteau, T., Sonnadara, R., Hansen, S., Burkitt, J., Gruevski, K., D'Amore, A., & Lyons, J. (November 2008). Hierarchical mappings in 3-dimensional auditory-spatial domain. SCAPPS, Kenmore, AB.
32. Sonnadara, R.R., **Gonzalez, D.**, Hansen, S.D., Elliott, D., & Lyons, J. (June 2008). Spatial properties of perceived pitch: influence on reaching movements. The Neurosciences and Music III, Montreal, QC.
33. Lee, T.D., Ishikura, T., Kegel, S., **Gonzalez, D.**, & Passmore, S. (March 2008). Coordination of head and putter movement in Expert and less-skilled golfers. Interdisciplinary Conference on Human Performance, Orlando, FL.
34. Glazebrook, C.M., **Gonzalez, D.**, Hansen, S., & Elliott, D. (November 2007). Eye-hand coordination in young adults with autism. SCAPPS, Windsor, ON.
35. Glazebrook, C.M., **Gonzalez, D.**, & Elliott, D. (May 2007). How will I reach that target? IMFAR, Seattle, WA.
36. **Gonzalez, D.**, Dubrowski, A., & Carnahan, H. (November 2006). Is vision the only afferent system that provides relevant pre-contact cues? SCAPPS, Halifax, NS.
37. **Gonzalez, D.**, Dubrowski, A., & Carnahan, H. (November 2005). The role of auditory cues in the anticipation of object mass when grasping. SCAPPS, Niagara Falls, ON.
38. **Gonzalez, D.**, Dubrowski, A., Praamsma, M., MacRae, H., & Carnahan, H. (October 2004). Control of laparoscopic grasping: Is it similar to prehension? SCAPPS, Saskatoon, SK.
39. Hung, C., **Gonzalez, D.**, Dubrowski, A., & Carnahan, H. (October 2004). Surface explorations using tools: The perception of friction. SCAPPS, Saskatoon, SK.
40. Praamsma, M., Carnahan, H., Backstein, D., **Gonzalez, D.**, Veillette, C., & Dubrowski, A. (October 2004). The use of auditory cues when drilling in a bone by novice and expert orthopaedic surgeons. SCAPPS, Saskatoon, SK.
41. Carnahan, H., **Gonzalez, D.**, Brydges, R., Kowalski, K., & Dubrowski, A. (May 2004). Haptic feedback for texture discrimination: From open to minimally invasive surgery. Association for Surgical Education, Houston, TX.
42. **Gonzalez, D.**, Kowalski, K., Carnahan, H., & Dubrowski, A. (November 2003). Magnification of the visual field and haptic perception when exploring surfaces with surgical snaps. SCAPPS, Hamilton, ON.
43. Kowalski, K., **Gonzalez, D.**, Dubrowski, A., & Carnahan, H. (November 2003). The integration of visual and haptic inputs when perceiving surface roughness. SCAPPS, Hamilton, ON.

## KNOWLEDGE TRANSLATION

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1. Role of Kinesiologist in Concussion Care. (2022). KinCan Conference. Canada.

2. Integrated Knowledge: Concussion Care. (2022). Nova Scotia Physiotherapy Association, Halifax, Canada.
3. Neuropsychological Assessment in Concussion Management. (2017). Ontario Hockey Association, Waterloo, Canada.
4. The New Approaches to Concussion Assessment. (2017). University of Limerick, Ireland.
5. Refining of Concussion Safety Protocols. (2016). University of Waterloo, Waterloo, Canada.
6. Sideline Assessment of Concussions using the COMPaSS Tool. (2015). University of Waterloo, Waterloo, Canada.
7. Weekly Matlab Sessions for KIN Undergraduate and Graduate Students (2014). University of Waterloo, Waterloo, Canada.
8. Kinematic analysis: Can it help us understand behaviour? (2011). University of Waterloo, Waterloo, Canada.
9. How to better interact with individuals with ASD (2010). Lutherwood Youth Employment Centre, Kitchener, Canada.
10. Can Individuals with ASD Afford Intended Actions (2009). Woodview Manor, Hamilton, Canada.
11. Sensory Integration: Beyond Visual Guidance (2009). McMaster University, Hamilton, Canada.
12. What if We Changed Task Demands for Individuals with ASD (2009). Woodview Manor, Hamilton, Canada.
13. Behavioural Outcomes of Movements: What do They Mean and What Does it Tell Us? (2008) University of Amsterdam, Amsterdam, Netherlands.
14. MAS: Minimally Access Surgery and Expertise. (2007). McMaster University, Hamilton, Canada.

## THESIS SUPERVISION- HIGHLY QUALIFIED PERSONNEL

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\*Assisted with HQP during post-doctoral, doctoral, and master's work

### Graduate [6 Total]:

1. \*Dylan Craig, MSc (Supervised by Eric Roy, 2015-2016)  
*Project Title: Kinematic analysis and perceived comfort in a two-item manipulation task*
2. \*Naime Tugac, MSc Student (Supervised by Ewa Niechwiej-Swedo, 2015-2017)  
*Project Title: The role of binocular vision on multisensory integration*
3. \*Amanda Forsyth, MSc Student (Supervised by Pam Bryden, 2014)  
*Project Title: Handedness throughout the lifespan: Cross-sectional view on sex differences*
4. \*Anthony Tapper, MSc (Supervised by Eric Roy & Ewa Niechwiej-Swedo, 2014-2015)  
*Project Title: Tracking recovery after mild traumatic brain injury using a visuospatial Memory Task (Thesis).*
5. \*Sara Scharoun, PhD Student (Supervised by Eric Roy & Pam Bryden, 2013-2015; Funded by NSERC)  
*Project Title: Motor planning in a cup manipulation task: Reaching and grasping.*  
*Project Title: Planning and etiquette in joint-action object manipulation: An embodied cooperative pegboard task*
6. \*Tea Lulic, MSc (Supervised by Eric Roy, 2013)  
*Project Title: Evaluation of Leap motion tracking system for assessment of hand kinematics.*

### Undergraduate [11 Total]:

1. NaRae Lee, BSc Honours (September 2022-April 2023)  
*Project Title: Investigating myofascial release technique in reducing post-concussion syndrome symptoms*
2. \*Michelle Leclerc, BSc (Supervised by Ewa Niechwiej-Szwedo, 2016-2017)  
*Project Title: The effects of task-relevant saccadic eye movements performed during the encoding of a serial sequence on visuospatial memory performance*
3. \*Tommy Gingras, BSc (Supervised by Eric Roy, 2014-2015)  
*Project Title: Can weight lifting be considered an especial skill?*
4. \*Jone Kim, BSc (Supervised by Dr. James Tung, 2015)  
*Project Title: Assessment using Leap Motion: Filtering Methods and Performance in Indoor and Outdoor Environments*
5. \*Adam Mintz, BSc (Supervised by Eric Roy, 2014; Funded by NSERC)  
*Project Title: Planning and etiquette in joint-action object manipulation: An embodied cooperative pegboard task*  
*Project Title: Motor Control Assessment using Leap Motion: Filtering Methods and Performance in Indoor and Outdoor Environments.*
6. \*Kaitlyn Barnett, BSc (Supervised by Eric Roy, 2014)  
*Project Title: Sport specific concussion testing: New detection method for soccer*
7. \*Alex Scherger, BSc (Supervised by Eric Roy, 2014)  
*Project Title: Bimanual coordination and hand transference.*
8. \*Leonardo Martin, BSc (Supervised by Ewa Niechwiej-Swedo, 2014; Funded by NSERC)  
*Project Title: The role of covert vs overt attention during a visuospatial working memory task.*
9. \*Roshani Gnanaseelan, BSc (Supervised by Ewa Niechwiej-Swedo, 2014)  
*Project Title: The role of binocular vision in prehension movements performed visually stimulating environments.*

10. \*Moe Siva, BSc (Supervised by Eric Roy, 2013)  
*Project Title: Handedness throughout the lifespan: Cross-sectional view on sex differences*
11. \*Cheryl Lavall, BSc (Supervised by Jim Lyons, 2008)  
*Project Title: The effects of "traffic calming" measures on the focus of attention*
12. \*Cindy Hung, BSc (Supervised by Heather Carnahan, 2004)  
*Project Title: Surface exploration using a surgical instrument: The perception of friction*

#### **JOURNAL REVIEWER (alphabetical)**

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1. Acta Psychologica
2. Experimental Brain Research
3. Frontiers in Psychology
4. Human Movement Science
5. Journal of Developmental Psychobiology
6. Journal of Motor Behavior
7. Somatosensory & Motor Research