

# Corson N. Areshenkoff

areshenk@protonmail.com • www.areshenkblog.com  
Queens University • Kingston, Ontario • Canada

---

## Education

Queens University	KINGSTON, ONTARIO, CANADA
<b>PhD in Psychology</b>	2017 –
University of Victoria	VICTORIA, BRITISH COLUMBIA, CANADA
<b>MSc in Psychology</b>	2015 – 2016
Thesis: Task-dependent motor representations evoked by spatial words	
<b>BSc in Mathematics</b>	2012 – 2015

---

## Publications

- Areshenkoff, C. N.**, Bub, D. N., & Masson, M. E. (In preparation). Analysis and interpretation of motion tracking in cognitive science.
- Karr, J. E., **Areshenkoff, C. N.**, Rast, P., Hofer, S.M., Iverson, G.L., & Garcia-Barrera, M.A. (Submitted). The Unity and Diversity of Executive Functions: A Systematic Review and Re-Analysis of Latent Variable Studies.
- Areshenkoff, C. N.**, Bub, D. N., & Masson, M. E. (2017). Task-dependent motor representations evoked by spatial words: Implications for embodied accounts of word meaning. *Journal of Memory and Language*, 92, 158-169.
- Smart, C. M., Karr, J. E., **Areshenkoff, C. N.**, Rabin, L. A., Hudon, C., Gates, N., ... & Hampel, H. (2017). Non-pharmacologic interventions for older adults with subjective cognitive decline: systematic review, meta-analysis, and preliminary recommendations. *Neuropsychology Review*, 1-13.
- Karr, J. E., **Areshenkoff, C. N.**, Duggan, E. C., & Garcia-Barrera, M. A. (2014). Blast-related mild traumatic brain injury: a Bayesian random-effects meta-analysis on the cognitive outcomes of concussion among military personnel. *Neuropsychology review*, 24(4), 428-444.
- Karr, J. E., **Areshenkoff, C. N.**, & Garcia-Barrera, M. A. (2014). The neuropsychological outcomes of concussion: A systematic review of meta-analyses on the cognitive sequelae of mild traumatic brain injury. *Neuropsychology*, 28(3), 321.
- Karr, J. E., **Areshenkoff, C. N.**, Rast, P., & Garcia-Barrera, M. A. (2014). An empirical comparison of the therapeutic benefits of physical exercise and cognitive training on the executive functions of older adults: A meta-analysis of controlled trials. *Neuropsychology*, 28(6), 829.
- Karr, J. E., Garcia-Barrera, M. A., & **Areshenkoff, C. N.** (2014). Executive functions and intraindividual variability following concussion. *Journal of clinical and experimental neuropsychology*, 36(1), 15-31.

## Conference Presentations

- Areshenkoff, C.N.**, Daniel N. Bub, & Michael E.J. Masson (2016). Parallel Encoding of Alternative Action Possibilities Alters the Execution of a Cued Action. Poster presented at the 31st meeting of the Society for the Neuroscience of Decision Making. Montreal, QC.
- Areshenkoff, C.N.** (2015). The Temporal Dynamics of Motor Affordances. Presented at the 31st meeting of the Perceptual Expertise Network. New Orleans, LA.
- Mulligan, B. P., **Areshenkoff, C. N.**, & Smart, C. M. (2015, September). EEG entropy predicts intensively-measured cognitive performance in healthy older adults. In *Psychophysiology* (Vol. 52, pp. S25-S25). 111 River St, Hoboken 07030-5774, NJ USA: Wiley-Blackwell.
- Areshenkoff, C.N.**, Bub, D.N., Masson, M.E.J. (2015). *Embodied representations of word meaning*. Paper presented at the annual meeting of the Canadian Society for Brain, Behaviour, and Cognitive Science. Ontario, Canada.
- Areshenkoff, C.N.**, Karr, J.E., Garcia-Barrera, M.A. (2013). *Performance Patterns on Card Selection during the Iowa Gambling Task: Preliminary Evidence of High Sensitivity to Losses after mTBI [Abstract]* *Journal of the International Neuropsychological Society*, 19 (S2), 75. doi: 10.1017/S1355617713001033
- Areshenkoff, C.N.**, Karr, J.E., Crevier-Quintin, E., Garcia-Barrera, M.A. (2013). *The Benefits of Physical and Cognitive Training Programs on Executive Functions among Older Adults: A Meta-Analytical Comparison*. Poster presented to the Forty-First Annual Meeting of the International Neuropsychological Society, Waikoloa, Hawaii.

Karr, J.E., **Areshenkoff, C.N.**, Evans, J., Jewett, D., Nguyen, K., Tutt, G., & Garcia-Barrera, M.A. (October 20, 2012). *Physical Exercise versus Cognitive Training on Executive Functioning: Its a Tie! A Meta-Analysis of Controlled Trials during Healthy Aging*. Lecture presented at the Forty-First Annual Scientific and Educational Meeting of the Canadian Association on Gerontology, Vancouver, British Columbia.

Karr, J.E., & **Areshenkoff, C.N.** (October 3, 2012). *Meta-Analysis of Controlled Clinical Trials: A Series of Methodological Considerations*. Lecture presented at the Department of Psychology Methods Seminar, University of Victoria, British Columbia.

Grindstaff, T.R., Karr, J.E., **Areshenkoff, C.N.**, Saville, K.A., Alexander, J.E., & Alexander, R.G. (May 26, 2012). *Frontal and Parietal Differences in P300 Amplitude and Latency during a Self-Evaluation Task*. Poster presented at the Twenty-Fourth Annual Convention of the Association for Psychological Science, Chicago, Illinois.

---

## Skills

**Programming:** Several years experience in R, Python, Matlab/Psychtoolbox, and Latex, as well as a passing familiarity with C++.

**Statistics:** Bayesian statistics, multi-level modelling, meta-analysis, spherical/directional statistics, functional data analysis.

---

## Projects

### **grasp (in progress)**

R package for the preprocessing and analysis of three dimensional motion tracking data.

### **igt (in progress)**

R/Stan package for the simulation/estimation of reinforcement learning models of the Iowa Gambling Task.

### **MSMVSampEn**

R package for computing multi-scale multivariate sample entropy of biological signals.

### **solitaiRe**

R package implementing the Solitaire encryption algorithm developed by Bruce Schneier and described in Neil Stephenson's *Cryptonomicon*.

---