

CURRICULUM VITAE

Ryan S. Williams

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EDUCATION

Doctor of Philosophy, Psychology (2024)

University of Toronto

Supervised by Dr. Jay Pratt and Dr. Susanne Ferber

Dissertation: Attentional Templates in Context: Understanding the Tuning of Target Features During High- versus Low-Similarity Search

Master of Arts, Psychology (2017)

University of Toronto

Supervised by Dr. Jay Pratt and Dr. Susanne Ferber

Thesis: "Don't Look Down": Alpha-Band Activity Reveals Selection Prior to Suppression of to-be-Ignored Locations

Bachelor of Arts (Hons), Psychology (2015)

Toronto Metropolitan University (Formerly Ryerson University)

Supervised by Dr. Julia Spaniol

Thesis: Age Differences in the Attention Network Test: Evidence from Behaviour and Event-Related Potentials

WORK EXPERIENCE

Postdoctoral Researcher

Carnegie Mellon University

Supervised by Dr. Susanne Ferber

October, 2024 – Present

Postdoctoral Fellow

University of Toronto

Supervised by Dr. Jay Pratt and Dr. Susanne Ferber

*February, 2024 – August, 2024***HONOURS AND AWARDS**

**Natural Sciences and Engineering Research Council Canadian Graduate Scholarship
Doctoral** (*September 2017 – December 2020*)

\$116,700 CAD

**Social Sciences and Humanities Research Council Canadian Graduate Scholarship –
Master's** (*September 2016 – August 2017*)

\$17,500 CAD

J. Davidson Ketchum Graduate Scholarship in Psychology (*September 2016*)

\$5,000 CAD

**Natural Sciences and Engineering Research Council Undergraduate Student Research
Award** (*May 2015 – August 2015*)

\$4,500 CAD

CPA Certificate of Academic Excellence (*June 2015*)**BIBLIOGRAPHY**

MANUSCRIPTS in PROGRESS

Williams, R. S., Saito, J. M., Fukuda, K., & Ferber, S. (in prep). Exemplar-specific maintenance of target objects in visual working memory despite category sufficiency for search.

Williams, R. S., Ferber, S., & Pratt, J. (in prep). Expectancy-based adjustments of mnemonic target specificity are observable in raw EEG delay activity.

Williams, R. S., Ferber, S., & Pratt, J. (in prep). Effect of Encoding Salience on Memory-Driven Capture when Multiple Items are Maintained.

Williams, R. S., & Ferber, S. (in prep). Inter-Item Memory Distortions are Determined by Representational Fidelity and Task-Relevance.

PEER-REVIEWED PAPERS

Williams, R. S., Ferber, S., & Pratt, J. (2025). Disentangling the contributions of spatiotopic, retinotopic, and configural frames of reference to the filtering of probable distractor locations. *Journal of Experimental Psychology: Human Perception and Performance*. Advance online publication.

Williams, R. S., Ferber, S., & Pratt, J. (2023). The specificity of feature-based attentional guidance is equivalent under single- and dual-target search. *Journal of Experimental Psychology: Human Perception and Performance*, *49*, 1430–1446.

Williams, R. S., Pratt, J., Ferber, S., & Cant, J. S. (2021). Tuning the ensemble: Incidental skewing of the perceptual average through memory-driven selection. *Journal of Experimental Psychology: Human Perception and Performance*, *47*, 648–661.

Williams, R. S., Pratt, J., & Ferber, S. (2020). Directed avoidance and its effect on visual working memory. *Cognition*, *201*, 104227:1–12.

Williams, R. S., Kudus, F., Dyson, B. J., & Spaniol, J. (2018). Transient and sustained incentive effects on electrophysiological indices of cognitive control in younger and older adults. *Cognitive, Affective, & Behavioral Neuroscience*, *18*, 313–330.

Williams, R. S., Biel, A. L., Dyson, B. J., & Spaniol, J. (2017). Age differences in gain- and loss-motivated attention. *Brain and Cognition*, *111*, 171–181.

Williams, R. S., Biel, A. L., Wegier, P., Lapp, L. K., Dyson, B. J., & Spaniol, J. (2016). Age differences in the Attention Network Test: Evidence from behavior and event-related potentials. *Brain and Cognition*, *102*, 65–79.

CONFERENCE PRESENTATIONS

Williams, R. S., Pratt, J., & Ferber, S. (2025, May). *Differences in Inter-Item Salience at Encoding Produce Imbalanced Attentional and Representational Visual Working Memory Biases*. Poster presented at the annual meeting of the Vision Sciences Society, St. Pete Beach, FL.

Williams, R. S., Pratt, J., & Ferber, S. (2024, November). *Attention is guided by a range of feature values when visually similar features are held in visual working memory*. Poster presented at the annual meeting of the Psychonomic Society, New York, NY. [\[PDF\]](#)

Menon, T., Nisenbaum, A., Williams, R. S., Ferber, S. (2024, November) *The Attentional Sharpening Effect in Older Adults*. Poster presented at the annual meeting of the Psychonomic Society, New York, NY.

Williams, R. S., Saito, J. M., Fukuda, K., & Ferber, S. (2024, April). *Tracking the Transition from Stimulus-Specific Object Representations to Category-Level Abstractions During Visual Search*. Poster presented at the annual meeting of the Cognitive Neuroscience Society, Toronto, ON. [\[PDF\]](#)

Williams, R. S., Pratt, J., & Ferber, S. (2023, November). *Effects of learned spatial probability are suspended, but not eliminated, during parallel search*. Poster presented at the annual OPAM conference, San Francisco, CA. [\[PDF\]](#)

Williams, R. S., Pratt, J., & Ferber, S. (2023, May). *Tracking the time-course of attentional sharpening using EEG*. Poster presented at the annual meeting of the Vision Sciences Society, St. Pete Beach, FL. [\[PDF\]](#)

Williams, R. S., Pratt, J., & Ferber, S. (2022, November). *Not so spatial after all? Learned suppression of probable distractor locations acts on spatially invariant, configural representations*. Poster presented at the annual meeting of the Psychonomic Society, Boston, MA. [\[PDF\]](#)

Williams, R. S., Ferber, S., & Pratt, J. (2022, May). *Examining a hybrid account of salience-based amplification during perceptual average judgments*. Poster presented at the annual meeting of the Vision Sciences Society, St. Pete Beach, FL. [\[PDF\]](#)

Williams, R. S., Pratt, J., & Ferber, S. (2021, November). *The influence of distractor expectancies on visual working memory interference across and within feature dimensions*. Poster presented at the annual meeting of the Psychonomic Society. [\[PDF\]](#)

Williams, R. S., Ferber, S., & Pratt, J. (2021, May). *Transfer of attentional sharpening across contexts is stimulus-specific*. Poster presented at the annual meeting of the Vision Sciences Society. [\[PDF\]](#)

Williams, R. S., Wang, X. O., Ferber, S., & Pratt, J. (2021, March). *Transfer of attentional sharpening across contexts is stimulus-specific*. Poster presented at the annual meeting of the Cognitive Neuroscience Society. [\[PDF\]](#)

Williams, R. S., Pratt, J., & Ferber, S. (2020, November). *Graded modulation of stimulus-response bindings by intervening events*. Poster presented at the annual meeting of the Psychonomic Society. [\[PDF\]](#)

Williams, R. S., Ferber, S., & Pratt, J. (2020, June). *Multiple target templates are maintained without a cost to precision*. Poster presented at the annual meeting of the Vision Sciences Society. [\[PDF\]](#)

Williams, R. S., Ferber, S., & Pratt, J. (2019, November). *Attentional template specificity is modulated by task demands for single and multiple control settings*. Poster presented at the annual meeting of the Psychonomic Society, Montreal, QC. [\[PDF\]](#)

Williams, R. S., Pratt, J., Ferber, S., & Cant, J. S. (2019; May). *The contents of visual working memory bias ensemble perception*. Poster presented at the annual meeting of the Vision Sciences Society, St. Pete Beach, FL. [\[PDF\]](#)

Williams, R. S., Pratt, J., & Ferber, S. (2018, November). *Non-target cueing benefit in visual working memory is independent of cue-target compatibility*. Poster presented at the annual meeting of the Psychonomic Society, New Orleans, LA. [\[PDF\]](#)

Williams, R. S., Newman, R., Pratt, J., & Ferber, S. (2018, May). *The attentional “white bear” evades visual working memory*. Poster presented at the annual meeting of the Vision Sciences Society, St. Pete Beach, FL. [\[PDF\]](#)

Williams, R. S., Pratt, J., & Ferber, S. (2017, November). *Intentional suppression of attention to spatial locations takes time*. Poster presented at the annual meeting of the Psychonomic Society, Vancouver, BC. [\[PDF\]](#)

Williams, R. S., Pratt, J., & Ferber S. (2017, May). The influence of precueing task-irrelevant locations on attentional capture. Poster presented at the Banff Annual Seminar in Cognitive Science, Banff, AB.