

# Matthew J. C. Crump | Curriculum Vitae

Department of Psychology  
Brooklyn College, CUNY  
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## POSITIONS HELD

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|--------------|--------------------------------------------------------------------------|
| 2024-present | Chairperson, Department of Psychology, Brooklyn College of CUNY          |
| 2022-present | Full Professor, Department of Psychology, Brooklyn College of CUNY       |
| 2016-2022    | Associate Professor, Department of Psychology, Brooklyn College of CUNY  |
| 2011-2016    | Assistant Professor, Department of Psychology, Brooklyn College of CUNY  |
| 2011-present | Doctoral Faculty, Psychology, Graduate Center of CUNY                    |
| 2007-2011    | Postdoctoral Researcher, Department of Psychology, Vanderbilt University |

## EDUCATION

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|------|---------------------------------------------------------------------------|
| 2007 | Ph.D. Psychology, McMaster University, Hamilton, ON, Canada               |
| 2002 | B.Sc. (Hon.) Psychology, University of Lethbridge, Lethbridge, AB, Canada |

## PUBLICATIONS

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(\* = Postdoctoral Associate, \*\* = Doctoral Student, \*\*\* = Undergraduate Student)

- 1 Johns, B. T., Jamieson, R. K., **Crump, M. J. C.**, & Jones, M. N. (2026). Instance memory models as a general computational framework for exploring language processing: Bringing the lexicon to life. *R. Linguistics Vanguard*, 12(s1), 163-172. <https://doi.org/10.1515/lingvan-2024-0201>
- 2 Jamieson, R. K., & **Crump, M. J. C.** (2025). An instance model of associative inference. *R. The American Journal of Psychology*, 138(2), 231-247. <https://scholarlypublishingcollective.org/uip/ajp/article-abstract/138/2/231/404898/An-Instance-Model-of-Associative-Inference>
- 3 Schneider, D. W., **Crump, M. J. C.**, & Verbruggen, F. (2025). Preface. *The American Journal of Psychology*, 138(2). Preface to the Gordon D. Logan Festschrift.
- 4 \*Behmer, L. P., Jr., **Crump, M. J. C.**, & Jantzen, K. J. (2023). Motor-evoked potentials for early individual elements of an action sequence during planning reflect parallel activation processes. *R. Motor Control*. Published online ahead of print.
- 5 \*\*Brosowsky, N. P., & **Crump, M. J. C.** (2021). Contextual recruitment of selective attention can be updated via changes in task relevance. *R. Canadian Journal of Experimental Psychology*, 75, 19-34. <https://doi.org/10.1037/cep0000221>
- 6 **Crump, M. J. C.** (2021). *Instances of cognition: Questions, methods, findings, explanations, applications, and implications*. Undergraduate textbook. Open educational resource. <https://www.crumplab.com/cognition/textbook/>
- 7 **Crump, M. J. C.** (2021). *Reproducible statistics for psychologists with R: Lab tutorials*. Graduate textbook. Open educational resource. <https://www.crumplab.com/rstatsforpsych>
- 8 Vuorre, M., & **Crump, M. J. C.** (2021). Sharing and organizing research products as R packages. *R. Behavior Research Methods*, 53, 792-802. <https://doi.org/10.3758/s13428-020-01436-x>
- 9 **Crump, M. J. C.**, Jamieson, R. K., Johns, B. T., & Jones, M. N. (2020). Controlling the retrieval of general vs specific semantic knowledge in the instance theory of semantic memory. *R. In S. Denison, M. Mack, Y. Xu, & B. C. Armstrong (Eds.), Proceedings of the 42nd Annual Conference of the Cognitive Science Society* (pp. 3261-3267). Cognitive Science Society.
- 10 Johns, B. T., Jamieson, R. K., **Crump, M. J. C.**, Jones, M. N., & Mewhort, D. J. K. (2020). Production without rules: Using an instance memory model to exploit structure in natural language. *R. Journal of Memory and Language*, 115, 104165. <https://doi.org/10.1016/j.jml.2020.104165>
- 11 Aujla, H., **Crump, M. J. C.**, Cook, M. T., & Jamieson, R. K. (2019). The Semantic Librarian: A search engine built from vector-space models of semantics. *R. Behavior Research Methods*, 51, 2405-2418. <https://doi.org/10/gf6cmv>

- 12 Braem, S., Bugg, J. M., Schmidt, J. R., **Crump, M. J. C.**, Weissman, D. H., Notebaert, W., & Eegner, T. (2019). Measuring adaptive control in conflict tasks. R. *Trends in Cognitive Sciences*, 23, 769-783. <https://doi.org/10.1038/s41562-019-0733-0>
- 13 **Crump, M. J. C.** (2019). Portfolio and prosper. Invited. *Nature Human Behaviour*, 3, 1008. <https://doi.org/10.1038/s41562-019-0733-0>
- 14 **Crump, M. J. C.**, \*\*\*Lai, W., & \*\*Brosowsky, N. P. (2019). Instance theory predicts information theory: Episodic uncertainty as a determinant of keystroke dynamics. R. *Canadian Journal of Experimental Psychology*, 73, 203-215.
- 15 \*Behmer, L. P., Jr., Jantzen, K. J., Martinez, S., Walls, R., Amir-Brownstein, E., Jaye, A., Leytze, M., Lucier, K., & **Crump, M. J. C.** (2018). Parallel regulation of past, present, and future actions during sequencing. R. *Journal of Experimental Psychology: Human Perception and Performance*, 44(8), 1147-1152. <https://doi.org/10.1037/xhp0000507>
- 16 \*\*Brosowsky, N. P., & **Crump, M. J. C.** (2018). Memory-guided selective attention: Experiences with conflict have long-lasting effects on cognitive control. R. *Journal of Experimental Psychology: General*, 147(8), 1134-1153.
- 17 **Crump, M. J. C.**, Krishnan, A., Volz, S., Chavarga, A., & Suzuki, J. (2018). *Answering questions with data: The lab manual*. Undergraduate textbook. Open educational resource. <https://crumplab.github.io/statisticsLab/>
- 18 **Crump, M. J. C.**, Milliken, B., Leboe-McGowan, J. P., Leboe-McGowan, L. C., & Gao, X. (2018). Context-dependent control of attention capture: Evidence from proportion congruent effects. R. *Canadian Journal of Experimental Psychology*, 72, 91-104. <https://doi.org/10.1037/cep0000145>
- 19 **Crump, M. J. C.**, Navarro, D., & Suzuki, J. (2018). *Answering questions with data: Introductory statistics for psychology students*. Undergraduate textbook. Open educational resource. <https://crumplab.github.io/statistics/>
- 20 \*Behmer, L. P., & **Crump, M. J. C.** (2017). The dynamic range of response set activation during action sequencing. R. *Journal of Experimental Psychology: Human Perception and Performance*, 43(3), 537-554.
- 21 \*Behmer, L. P., & **Crump, M. J. C.** (2017). Crunching big data with finger tips: How typists tune their performance toward the statistics of natural language. R. In M. N. Jones (Ed.), *Big Data in Cognitive Science* (pp. 319-341). Routledge.
- 22 \*Behmer, L. P., & **Crump, M. J. C.** (2017). Spatial knowledge during skilled action sequencing: Hierarchical versus non-hierarchical representations. R. *Attention, Perception & Psychophysics*, 79, 2435-2448. <https://doi.org/10.3758/s13414-017-1389-3>
- 23 **Crump, M. J. C.** (2017). *Programming for psychologists: Data creation and analysis*. Undergraduate textbook. Open educational resource. <https://crumplab.github.io/programmingforpsych/>
- 24 **Crump, M. J. C.**, \*\*Brosowsky, N. P., & Milliken, B. (2017). Reproducing the location-based context-specific proportion congruent effect for frequency unbiased items: A reply to Hutcheon & Spieler (2016). R. *The Quarterly Journal of Experimental Psychology*, 70, 1792-1807.
- 25 **Crump, M. J. C.**, Price, P. C., Jhangiani, R., Chiang, I.-C. A., & Leighton, D. C. (2017). *Research methods in psychology*. Undergraduate textbook. Open educational resource. <https://crumplab.github.io/ResearchMethods/>
- 26 Zumsteg, J. W., **Crump, M. J. C.**, Logan, G. D., Weikert, D. R., & Lee, D. H. (2017). The effect of carpal tunnel release on typing performance. R. *The Journal of Hand Surgery*, 42, 17-23. <https://doi.org/10.1016/j.jhssa.2016.10.005>
- 27 \*\*Brosowsky, N. P., & **Crump, M. J. C.** (2016). Context-specific attentional sampling: Intentional control as a pre-requisite for contextual control. R. *Consciousness and Cognition*, 44, 146-160. <https://doi.org/10.1016/j.concog.2016.07.001>
- 28 **Crump, M. J. C.** (2016). Learning to selectively attend from context-specific attentional histories: A demonstration and some constraints. R. *Canadian Journal of Experimental Psychology*, 70, 59-77.
- 29 Curtis, E. T., Chubala, C. M., Spear, J., Jamieson, R. K., Hockley, W. E., & **Crump, M. J. C.** (2016). False recognition of instruction-set lures. R. *Memory*, 24, 32-43.
- 30 Johns, B. T., Jamieson, R. K., **Crump, M. J. C.**, Jones, M. N., & Mewhort, D. J. K. (2016). The combinatorial power of experience. R. In *Proceedings of the 38th Annual Conference of the Cognitive Science Society*. Cognitive Science Society.
- 31 **Crump, M. J. C.**, & Logan, G. D. (2013). Prevention and correction in post-error performance: An ounce of prevention, a pound of cure. R. *Journal of Experimental Psychology: General*, 142, 692-709.

- 32 **Crump, M. J. C.**, McDonnell, J. V., & Gureckis, T. M. (2013). Evaluating Amazon's mechanical Turk as a tool for experimental behavioral research. R. *PLoS ONE*, 8(3), e57410.
- 33 Yamaguchi, M., **Crump, M. J. C.**, & Logan, G. D. (2013). Speed accuracy-tradeoff in skilled typewriting: Decomposing the contributions of hierarchical control loops. R. *Journal of Experimental Psychology: Human Perception and Performance*, 39(3), 678-699.
- 34 Bugg, J. M., & **Crump, M. J. C.** (2012). In support of a distinction between voluntary and stimulus-driven control: A review of the literature on proportion congruent effects. R. *Frontiers in Psychology*, 3(367), 1-16.
- 35 **Crump, M. J. C.** (2012). Review of *Guitar Zero: The new musician and the science of learning*.
- 36 **Crump, M. J. C.**, Logan, G. D., & Kimbrough, J. (2012). Keeping an eye on guitar skill: Visual representations of guitar chords. R. *Music Perception: An Interdisciplinary Journal*, 30(1), 37-47.
- 37 Jamieson, R. K., **Crump, M. J. C.**, & Hannah, S. D. (2012). An instance theory of associative learning. R. *Learning & Behavior*, 40(1), 61-82.
- 38 Logan, G. D., & **Crump, M. J. C.** (2011). Hierarchical control of cognition and action: The case for skilled typewriting. R. In B. H. Ross (Ed.), *Psychology of Learning and Motivation* (Vol. 54, pp. 1-27). Elsevier.
- 39 **Crump, M. J. C.**, & Logan, G. D. (2010). Warning, this keyboard will de-construct: The role of the keyboard in skilled typewriting. R. *Psychonomic Bulletin & Review*, 17(3), 394-399.
- 40 **Crump, M. J. C.**, & Logan, G. D. (2010). Contextual control over task-set retrieval. R. *Attention, Perception & Psychophysics*, 72(8), 2047-2053.
- 41 **Crump, M. J. C.**, & Logan, G. D. (2010). Hierarchical control and skilled typing: Evidence for word level control over the execution of individual keystrokes. R. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 36(6), 1369-1380.
- 42 **Crump, M. J. C.**, & Logan, G. D. (2010). Episodic contributions to sequential control: Learning from a typist's touch. R. *Journal of Experimental Psychology: Human Perception and Performance*, 36(3), 662-672.
- 43 Jamieson, R. K., Hannah, S. D., & **Crump, M. J. C.** (2010). A memory-based account of retrospective revaluation. R. *Canadian Journal of Experimental Psychology*, 64(3), 153-164.
- 44 Liu, X., **Crump, M. J. C.**, & Logan, G. D. (2010). Do you know where your fingers have been? Explicit knowledge of the spatial layout of the keyboard in skilled typists. R. *Memory & Cognition*, 38(4), 474-484.
- 45 Logan, G. D., & **Crump, M. J. C.** (2010). Cognitive illusions of authorship reveal hierarchical error detection in skilled typists. R. *Science*, 330(6004), 683-686.
- 46 **Crump, M. J. C.**, & Milliken, B. (2009). The flexibility of context-specific control: Evidence for context-driven generalization of item-specific control settings. R. *The Quarterly Journal of Experimental Psychology*, 62(8), 1523-1532.
- 47 Hannah, S. D., **Crump, M. J. C.**, Allan, L. G., & Siegel, S. (2009). Cue-interaction effects in contingency judgments using the streamed-trials procedure. R. *Canadian Journal of Experimental Psychology/Revue canadienne de psychologie expérimentale*, 63(2), 103-112.
- 48 Logan, G. D., & **Crump, M. J. C.** (2009). The left hand doesn't know what the right hand is doing: The disruptive effects of attention to the hands in skilled typewriting. R. *Psychological Science*, 20(10), 1296-1300.
- 49 Siegel, S., Allan, L. G., Hannah, S. D., & **Crump, M. J. C.** (2009). Applying signal detection theory to contingency assessment. R. *Comparative Cognition & Behavior Reviews*, 4, 116-134.
- 50 Allan, L. G., Hannah, S. D., **Crump, M. J. C.**, & Siegel, S. (2008). The psychophysics of contingency assessment. R. *Journal of Experimental Psychology: General*, 137(2), 226-243.
- 51 **Crump, M. J. C.**, Milliken, B., & Ansari, I. (2008). Shifting views on the symbolic cueing effect: Cueing attention through previous experience. R. *Psicológica*, 29(1), 97-114.
- 52 **Crump, M. J. C.**, Vaquero, J. M. M., & Milliken, B. (2008). Context-specific learning and control: The role of awareness, task-relevance, and relative salience. R. *Consciousness and Cognition*, 17(1), 22-36.
- 53 Leboe, J. P., Wong, J., **Crump, M. J. C.**, & Stobbe, K. (2008). Probe-specific proportion task repetition effects on switching costs. R. *Perception & Psychophysics*, 70(6), 935-945.
- 54 **Crump, M. J. C.**, Hannah, S. D., Allan, L. G., & Hord, L. K. (2007). Contingency judgments on the fly. R. *The Quarterly Journal of Experimental Psychology*, 60(6), 753-761.
- 55 Schmidt, J. R., **Crump, M. J. C.**, Cheesman, J., & Besner, D. (2007). Contingency learning without awareness: Evidence for implicit control. R. *Consciousness and Cognition*, 16(2), 421-435.
- 56 **Crump, M. J. C.**, Gong, Z., & Milliken, B. (2006). The context-specific proportion congruent effect: Location as a contextual cue. R. *Psychonomic Bulletin & Review*, 13(2), 316-321.

## Preprints and Works in Progress

- 1 \*\*Brosowsky, N. P., Parshina, O., Locicero, A., & **Crump, M. J. C.** (2021). Teaching undergraduate students to read empirical articles: An evaluation and revision of the QALMRI method. *PsyArXiv*. <https://doi.org/10.31234/osf.io/p39sc>
- 2 Piech, R. M., **Crump, M. J. C.**, & Zald, D. H. (2021). The negative contingency illusion: A cognitive bias leading to misjudgement of protection. *Research Square*. <https://doi.org/10.21203/rs.3.rs-671507/v1>

## INVITED TALKS

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- 1 **Crump, M. J. C.** (2022). Instance theory as a domain-general intuition pump for cognition. CCP colloquium @ The Graduate Center of CUNY.
- 2 **Crump, M. J. C.** (2019). Betrayed by your fingertips: Keystroke dynamics in typing as cognitive fingerprints. Brain and Cognitive Sciences Seminar @ University of Manitoba, Winnipeg, Manitoba, Canada.
- 3 **Crump, M. J. C.** (2018). Betrayed by your fingertips: Keystroke dynamics in typing as cognitive fingerprints. ConCats seminar @ NYU, New York, NY.
- 4 **Crump, M. J. C.** (2018). Creating Interactive Open Educational Resources with Hypothesis. Faculty Day Conference @ Brooklyn College, Brooklyn, NY.
- 5 **Crump, M. J. C.** (2018). Coordinating cognition at the fingertips: Insights from investigations into skilled typing ability. Department of Psychology, City Tech, Brooklyn, NY.
- 6 **Crump, M. J. C.** (2017). Coordinating cognition at the fingertips: Insights from investigations into skilled typing ability. Colloquium series, Department of Psychology, Bard College, Annandale-On-Hudson, NY.
- 7 **Crump, M. J. C.** (2016). The ways prior experience guides cognitive control: Proactive, Reactive, and retrieval-driven control. Cognition and Perception Seminar, Department of Psychology, Neuroscience, and Behavior, McMaster University, ON, Canada.
- 8 **Crump, M. J. C.**, & Gureckis, T. M. (2016). Uses and challenges of Mechanical Turk. Invited Workshop at the Association for Psychological Science, Chicago, IL.
- 9 **Crump, M. J. C.**, & Gureckis, T. M. (2015). Uses and challenges of Mechanical Turk. Invited Workshop at the Association for Psychological Science, New York, NY.
- 10 **Crump, M. J. C.** (2014). Coordinated Cognition: Insights into hierarchical control processes from the Psychology of skilled typewriting. Colloquium series, Department of Psychology, University of Manitoba, MB, CA.
- 11 **Crump, M. J. C.** (2014). Associative learning of attentional control strategies: Evidence from the proportion congruent literature. Colloquium series, Department of Psychology, New York University, New York, NY.
- 12 **Crump, M. J. C.** (2013). Coordinated Cognition: Insights into hierarchical control processes from the Psychology of skilled typewriting. Colloquium series, Department of Psychology, McMaster University, ON, CA.
- 13 **Crump, M. J. C.** (2012). Coordinated Cognition: Insights into hierarchical control processes from the Psychology of skilled typewriting. Cognitive Lunch Seminar, Department of Psychology, Columbia University, New York, NY.
- 14 **Crump, M. J. C.** (2012). Coordinated Cognition: Insights into hierarchical control processes from the Psychology of skilled typewriting. Cognitive Seminar, Department of Psychology, University of Granada, Spain.
- 15 **Crump, M. J. C.** (2010). Coordinating learning, memory, and attention during performance: Insights from the psychology of skilled typewriting. Invited Job talk. Psychology Department at Brooklyn College of CUNY.

## ABSTRACTS AND PAPERS CONTRIBUTED AT PROFESSIONAL MEETINGS

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- 1 **Crump, M. J. C.** (2023). Extending global-matching models to pictures and the Vokey effect. Canadian Society for Brain and Behavioral Sciences. Guelph.
- 2 \*\*Shives, D. W., \*\*\*Ihejirika, P., & **Crump, M. J. C.** (2022). The role of stimulus duration in directed forgetting for natural scenes. *Psychonomics*. Boston.
- 3 Jamieson, R. K., & **Crump, M. J. C.** (2021). An instance-based theory of implicit inference. Canadian Society for Brain, Behavior and Cognitive Science, Montreal.
- 4 **Crump, M. J. C.**, & Vuorre, M. (2020). Creating, curating, and communicating reproducible research with R packages: Vertical as a full-stack example. Society for Computation in Psychology, Online.

- 5 **Crump, M. J. C.**, Jamieson, R. K., & Aujla, H. (2019). Semantic Librarian for SCIP Abstracts: An R Shiny App and Package for Searching and Visualizing Semantic Spaces. Society for Computation in Psychology, Montreal.
- 6 Chammany, M. B., Palkowitz, S. R., **Crump, M. J. C.**, & \*Behmer, L. P. (2019). Changes in Cognitive Control After High-Demand Trials During Continuous Motor Performance: Slower Rts and Increases in Midline Theta. Psychonomics, Montreal.
- 7 Chammany, M. B., Palkowitz, S. R., **Crump, M. J. C.**, & \*Behmer, L. P. (2019). Increases in Midline and Frontal Theta Reflect the Degree of Cognitive Control Required During Continuous Motor Performance When Explicitly Monitoring Output. Psychonomics, Montreal.
- 8 Jamieson, R. K., Aujla, H., **Crump, M. J. C.**, & Cook, M. (2018). Using semantic memory theory to build an applied cognitive search engine. Society for Computers in Psychology, New Orleans.
- 9 **Crump, M. J. C.**, & \*\*Brosowsky, N. B. (2018). Instances and information: An instance theory account of sensitivity to uncertainty in natural text production. Society for Computers in Psychology. New Orleans.
- 10 \*\*Brosowsky, N. B., & **Crump, M. J. C.** (2018). You should hate this movie! Detecting hidden attitudes of online persuaders. Psychonomics, New Orleans.
- 11 \*\*Brosowsky, N. B., & **Crump, M. J. C.** (2017). Same Context, Different Control: Flexibly Shifting Between Context-Specific Control Settings. Psychonomics, Vancouver.
- 12 \*\*Brosowsky, N. B., & **Crump, M. J. C.** (2017). Learning to Selectively Ignore Information. Eastern Psychological Association, Boston.
- 13 \*Behmer, L. P., **Crump, M. J. C.**, Jantzen, K. J., Martinez, S., Walls, R., Amir-Brownstein, E., Jaye, A., Leytze, M., & Lucier, K. (2017). Motor evoked potentials reflect changes in rapid inhibitory control during serial ordering. Cognitive Neuroscience Society, San Francisco.
- 14 \*Behmer, L. P., & **Crump, M. J. C.** (2017). Cognitive Control for Action Sequencing. Eastern Psychological Association, Boston.
- 15 \*Behmer, L. P., & **Crump, M. J. C.** (2016, November). Theta-event related synchrony (ERS) as an index of outer-loop control during typing: Neural evidence supporting the two-loop theory of typing. Psychonomics, Boston, MA.
- 16 \*\*Brosowsky, N. P., & **Crump, M. J. C.** (2016, November). Long(er)-term item-specific Gratton effects. Psychonomics, Boston, MA.
- 17 Jamieson, R. K., Chubala, C. M., **Crump, M. J. C.**, & Hannah, S. D. (2016, June). A computational analysis of learning and heuristic inference. Canadian Society for Brain, Behaviour, and Cognitive Science, University of Ottawa, Ottawa, ON, Canada.
- 18 Johns, B. T., Jamieson, R. K., **Crump, J. C.**, Jones, M. N., & Mewhort, D. J. K. (2016, June). The combinatorial power of experience. Canadian Society for Brain, Behaviour, and Cognitive Science, University of Ottawa, Ottawa, ON, Canada.
- 19 \*Behmer, L. P., & **Crump, M. J. C.** (2016). Try not to think about what you're doing: Event-related desynchronization (ERD) in the SMA and event-related synchronization (ERS) in the frontal lobe reveals a dissociation of hierarchically controlled outer and inner loop processes during typing. Cognitive Neuroscience Society. New York, NY.
- 20 \*\*Brosowsky, N. P., & **Crump, M. J. C.** (2016). How typists talk to their fingers: Evidence for word-level verbal control of skilled action sequencing. International Meeting of the Psychonomic Society, Granada, Spain.
- 21 **Crump, M. J. C.**, & \*\*Brosowsky, N. P. (2016). Context-specific proportion congruent effects for frequency unbiased items: Novel extensions and analyses of reproducibility. International Meeting of the Psychonomic Society, Granada, Spain.
- 22 \*Behmer, L. P., & **Crump, M. J. C.** (2016). Knowing where to go when you get there: Dynamic construction of spatial knowledge during skilled action sequencing. International Meeting of the Psychonomic Society, Granada, Spain.
- 23 \*\*Brosowsky, P. N., & **Crump, M. J. C.** (2016). Contextual control over stimulus-response sets. Psychonomics, Eastern Psychological Association, New York, NY.
- 24 \*Behmer, L. P., & **Crump, M. J. C.** (2016). The dynamics of best laid action plans: Tracing response scheduling in skilled typing. Eastern Psychological Association, New York, NY.
- 25 Zumsteg, J., **Crump, M. J. C.**, Logan, G., Weikert, D., & Lee, D. (2016). The effect of carpal tunnel release surgery on post-operative typing function. 71st Annual Meeting of the American Society for Surgery of the Hand. Austin, TX.

- 26 \*Behmer, L. P., & **Crump, M. J. C.** (2015). The dynamics of best laid action plans: Tracing response scheduling in skilled typing. Psychonomics. Chicago, IL.
- 27 \*\*Brosowsky, P. N., & **Crump, M. J. C.** (2015). Contextual control of attentional sampling: Exploring the role of volition. Psychonomics, Chicago, IL.
- 28 **Crump, M. J. C.**, & \*Behmer, L. (2015). Learning, memory and the control of serial order for action. International Workshop in Learning, Memory, and Attention, Universidad de Granada, Granada, Spain.
- 29 \*\*Brosowsky, N., & **Crump, M. J. C.** (2015). Evidence for generalization of context-specific control in a flanker task. Eastern Psychological Association, Philadelphia, PA.
- 30 \*Behmer, L. P., & **Crump, M. J. C.** (2015). Typists develop sensitivity to the statistical frequencies of likely N-grams. Eastern Psychological Association, Philadelphia, PA.
- 31 **Crump, M. J. C.**, \*\*\*Blecher, M., & Jamieson, R. (2014). False memory for previously tested items: Investigating test-induced associative and repetition priming. Psychonomics, Long Beach, CA.
- 32 **Crump, M. J. C.** (2014). Learning and stimulus-driven cognitive control: Contextual cuing of explicit attention strategies. Eastern Psychological Association, Boston, MA.
- 33 \*\*Mitchell, K. M., & **Crump, M. J. C.** (2013). Betting on your inner homunculus: Query theory in a dynamic gambling task. Eastern Psychological Association, New York City, NY.
- 34 **Crump, M. J. C.** (2013). Stimulus-driven control of explicitly induced attention filtering demands. Psychonomics, Toronto, ON, CA.
- 35 **Crump, M. J. C.**, Gureckis, T. M., & McDonnell, J. V. (2012). Can internet data be trusted? Validating mechanical turk for cognitive research. Psychonomics, Minneapolis, MN.
- 36 Jamieson, R. K., **Crump, M. J. C.**, & Hannah, S. D. (2012). A computer tool to simulate and teach associative learning. Society for Computers in Psychology, Minneapolis, MN.
- 37 **Crump, M. J. C.** (2012). Error detection in Skilled Typing: Ounce of Prevention, Pound of Cure. Eastern Psychological Association. Pittsburgh, PA.
- 38 Jamieson, R. K., Hannah, S. D., & **Crump, M. J. C.** (2012). An instance theory of associative learning. Eastern Psychological Association, Pittsburgh, PA.
- 39 Jamieson, R. K., Chubala, C. M., Hannah, S. D., & **Crump, M. J. C.** (2012). An instance-based account of retrospective revaluation. Psychonomics, Minneapolis, MI.
- 40 \*\*Mitchell, K., & **Crump, M. J. C.** (2012). Poverty, attention and the power of the default option. Society for Judgment and Decision Making, Minneapolis, MI.
- 41 \*\*Mitchell, K., & **Crump, M. J. C.** (2012). Continuous tracking of Contingency Changes. Eastern Psychological Association. Pittsburgh, PA.
- 42 **Crump, M. J. C.** (2011). Mapping the fretboard: Investigating spatial representations of note information in skilled guitarists. Canadian Society for Brain, Behavioural, and Cognitive Sciences, Winnipeg, MA, CA.
- 43 **Crump, M. J. C.** (2011). Hitting the wall in skilled typing: Speed/Accuracy tradeoffs and serial processing. Psychonomics. Seattle, WA.
- 44 Jamieson, R. K., Hannah, S. D., & **Crump, M. J. C.** (2011). A simple network model of associative learning (not memory). Society for Computers in Psychology. Seattle, WA.

## GRANTS

### Funded

| Title                                                                                      | Agency                                                      | Amount     | Period                |
|--------------------------------------------------------------------------------------------|-------------------------------------------------------------|------------|-----------------------|
| Generative AI methods and applications for Psychology and the Cognitive Sciences           | Brooklyn College Provost Teaching Innovations Grant 2025-26 | \$2,500    | Spring 2026           |
| Remembering and forgetting pictures: Testing a computational instance-based account        | PSC-CUNY Traditional B                                      | \$6,000    | 2023-2024             |
| Instances of cognition: An open-educational resource for introductory Cognitive Psychology | CUNY OER Initiative                                         | \$15,000   | 2021                  |
| Recruitment of cognitive control for action sequencing                                     | PSC-CUNY Traditional B                                      | \$5,419.23 | July 2017 - June 2018 |
| Acquisition of hierarchical control in skilled action sequencing                           | National Science Foundation (#1353360)                      | \$356,073  | July 2014 - June 2017 |

| Title                                                                                               | Agency                                | Amount  | Period      |
|-----------------------------------------------------------------------------------------------------|---------------------------------------|---------|-------------|
| Validating web-based technology for investigating strategic and stimulus-driven attentional control | PSC-CUNY Traditional A (#66163-00 44) | \$3,478 | Summer 2013 |
| Chronometric investigations of explicit and implicit error detection processes in skilled typing    | PSC-CUNY Traditional A (#65075-00 43) | \$3,418 | Summer 2012 |

### Submitted

| Title                                                                                                                                                   | Agency                                                              | Amount requested         | Submitted     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|--------------------------|---------------|
| Answering questions with data: Teaching computational skills in introductory statistics to psychology undergraduates                                    | National Science Foundation (PI)                                    | \$299,470                | February 2021 |
| Cognitive, competitive, and emergent control processes for action sequencing                                                                            | National Science Foundation (PI)                                    | \$484,575                | August 2017   |
| Cognitive control for action sequencing                                                                                                                 | National Science Foundation (Co-PI)                                 | \$138,000                | November 2016 |
| Dynamics of cue-driven control over selection for attention and action                                                                                  | National Science Foundation (PI)                                    | \$411,790                | August 2016   |
| Designing and testing mediated physical spaces with human interaction sensing for increased multi-party goal satisfaction                               | National Science Foundation (Co-PI)                                 | \$980,172                | January 2016  |
| Contingency assessment ability and associative processing in normal, anxiety, orbitofrontal, and dorsolateral pre-frontal lesioned populations          | National Institutes of Health (SCORE program) (PI)                  | \$285,384 (direct costs) | January 2012  |
| Unraveling the serial-order problem in skilled performance: Investigating dynamic online control and learning of sequential structure in skilled typing | CUNY Junior Faculty Research Awards in Science and Engineering (PI) | \$50,000                 | November 2011 |
| Control hierarchies in error detection and correction                                                                                                   | PSC-CUNY (PI)                                                       | \$5,000                  | February 2011 |

### PROFESSIONAL AWARDS

- Doctoral Thesis Award, Certificate of Academic Excellence, Canadian Psychological Association (2008)
- Postgraduate Scholarship (PGS-D), Natural Sciences and Engineering Research Council of Canada (NSERC) (2005-2007)
- Ontario Graduate Scholarship (declined), Government of Ontario (2005)
- Ontario Graduate Scholarship, Government of Ontario (2003-2004)

### SOFTWARE AND OTHER CREATIVE WORK

- **midiblender**: An R package for generative MIDI sequencing and analysis. <https://www.crumplab.com/midiblender/>
- **NSFmarkdown**: An R Markdown template for NSF grants. <https://github.com/Crumplab/NSFmarkdown>
- **Semantic Librarian**: A website of cognitively inspired search engines for journal abstracts in the APA database, the CSBBSC conference database, the Society for Computation in Psychology database, and Psychonomics 2019. <https://www.semanticlibrarian.com>
- **conflictPower**: Monte Carlo power analysis for cognitive control designs. <https://www.crumplab.com/conflictPower/>
- **playjareyesores**: Functions for detecting textual overlap between documents. <https://www.crumplab.com/playjareyesores/>
- **jspsychr**: Write and run jsPsych experiments from RStudio. <https://www.crumplab.com/jspsychr/>
- **RsemanticLibrarian**: R functions for creating semantic librarians, a tool for vectorizing and visualizing semantic spaces from text. <https://www.crumplab.com/RsemanticLibrarian/>
- **vertical**: RStudio project template and workflow for sharing psychological research projects as a website. <https://www.crumplab.com/vertical/>

## UNIVERSITY, COLLEGE AND COMMUNITY SERVICE

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### Service to Brooklyn College

#### **College committees**

Spring 2021 - present Curriculum Committee for the Interdisciplinary Undergraduate Major in Data Analytics

#### **School and division committees**

Fall 2024 - present Faculty Council: Chair, Department of Psychology

Fall 2015 - May 2018 Faculty Council: Natural and Behavioral Sciences Representative

#### **Department committees**

Fall 2025 - present Co-Chair, Honors and Awards Committee

Fall 2024 - present Chair, Department of Psychology

2024 Department Self Study, Appendices working group

Fall 2022 - Spring 2023 Open Area Search Committee

2022 - present Master of Science in Psychological Research program reboot committee

2021 Experimental Psychology Masters Comprehensive Exam Evaluator

Spring 2019 Co-chair, search committee for lecturer line

Spring 2019 Director of the Experimental Psychology Graduate Program

May 2018 - June 2021; Appointments Committee (elected)

May 2022 - present

2018, Spring 2019, Fall Experimental Psychology Masters Executive Committee

2020, 2021, 2022, 2023

2018 Ad Hoc Independent Research Course Committee (chair)

February 2017 Doctoral Student Funding Committee

Fall 2014 Quantitative Job Search Committee

Fall 2014 - present Department Website Author

Fall 2014 - Spring 2018 Library Technology Liaison

Summer 2014 - Fall 2014 Experimental Psychology Master's Program Curriculum Committee

Spring 2014 Psychology Undergraduate Program Assessments Ad Hoc Committee

2013, 2017, 2018, 2019 Experimental Masters Admissions Committee

Fall 2013 Behavioral Neuroscience Job Search Committee

Spring 2013 Master's Program Review Committee

Spring 2012 - present Undergraduate Honors Committee

Fall 2011 - Spring 2013 Library Liaison

#### **Student activities**

Fall 2013 - 2015 Faculty liaison to the Undergraduate Psychology Club

Spring 2012, Fall 2012 Introductory lectures for visiting high school students

#### **Other service**

2011, 2012, 2013, 2014, Brooklyn College Honors Academy Reader

2016, 2017, 2021, 2022,

2023, 2024

Course pack author for PSYC 2530 Introduction to Cognitive Psychology

Course pack author for PSYC 3530 Advanced Cognitive Psychology

Website creator for the Cognitive and Comparative Psychology training area

Brooklyn College Day coordinator

Ad hoc Internet Satisfaction Committee

### Service to the University and Graduate Center

#### **University Service**

Fall 2026 - present Co-chair, Psychology Discipline Council, CUNY

#### **Doctoral program committees**

Fall 2024 - present Executive Committee, Department of Psychology, Graduate Center of CUNY

2024 PSC-CUNY Grant Review Panel, Cycle 55 (reviewer)

Spring 2021 Psychology Quantitative Research Ad Hoc Committee

2018 - present Cognition and Comparative Psychology Training Area Executive Committee

2017 - May 2018 Merger Committee to merge the Cognition, Language, and Development training area with the Animal Behavior and Comparative Psychology training area

January 2015 - May 2018 Cognition, Language, and Development Training Area Executive Committee

January 2015 - 2017 Training Area and Cluster Organization Committee

|                                   |                                                                  |
|-----------------------------------|------------------------------------------------------------------|
| December 2014 - May 2018          | Head of the Cognition, Language, and Development Training Area   |
| Fall 2014, 2015, 2016, 2017, 2018 | Cognition, Language, and Development Admissions Committee        |
| Fall 2013                         | Cognition, Language, and Development Ad Hoc Curriculum Committee |
| Fall 2012                         | Cognition, Brain and Behavior Executive Committee                |

**Service Off-Campus****Professional activities and memberships**

|                     |                                                                                                                                              |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| 2025                | Guest Editor, Gordon D. Logan Festschrift (with D. W. Schneider and F. Verbruggen), <i>The American Journal of Psychology</i> , 138(2)       |
| 2020-2021           | Diversity, Equity and Inclusion Committee, Society for Computation in Psychology (SCiP)                                                      |
| 2019 - present      | Consulting Editor, <i>Psychonomic Bulletin &amp; Review</i>                                                                                  |
| 2018 - present      | Review Board, <i>Journal of Experimental Psychology: Learning, Memory, and Cognition</i>                                                     |
| Fall 2014 - present | Steering Committee, Society for Computation in Psychology (SCiP)                                                                             |
| Fall 2012 - present | Review Board, <i>Canadian Journal of Experimental Psychology</i><br>Member, Eastern Psychological Association<br>Member, Psychonomic Society |

**Reviewing****Grant reviewing**

|               |                                                            |
|---------------|------------------------------------------------------------|
| Spring 2017   | Panel Reviewer, National Science Foundation (PAC division) |
| 2016, 2017    | External Grant Reviewer, National Science Foundation       |
| February 2013 | External Grant Reviewer, French National Research Agency   |

**Ad hoc reviewer (2011 - present)**

Acta Psychologica; Attention, Perception, and Psychophysics; Behavior Research Methods; Canadian Journal of Experimental Psychology; Cerebral Cortex; Cognition; Cognitive Psychology; Cognitive Science; Connection Science; Consciousness and Cognition; Current Directions in Psychological Science; Experimental Psychology; Frontiers in Cognition; Journal of Experimental Psychology: Applied; Journal of Experimental Psychology: Animal Learning and Cognition; Journal of Experimental Psychology: General; Journal of Experimental Psychology: Human Perception and Performance; Journal of Experimental Psychology: Learning, Memory, and Cognition; Perceptual and Motor Skills; *Psicologica*; Psychological Research; *Psychonomic Bulletin & Review*; Quarterly Journal of Experimental Psychology

**MENTORSHIP**

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**Postdoctoral Associates**

|                 |                    |
|-----------------|--------------------|
| Lawrence Behmer | Summer 2014 - 2018 |
|-----------------|--------------------|

**Doctoral Students**

|                     |                                                                  |
|---------------------|------------------------------------------------------------------|
| Drew Shives         | 2021-current; Cognitive and Comparative Psychology training area |
| Nicholaus Brosowsky | 2014-2019; Cognition, Language, and Development training area    |
| Kevonte Mitchell    | 2012-current; Brain, Cognition, and Behavior program             |
| Felicia Valetta     | 2011-2014; Brain, Cognition, and Behavior program                |

**Master's Students**

|                        |                                                                |
|------------------------|----------------------------------------------------------------|
| Ashot Balayan          | 2 Independent Research, 1 Independent Reading, Master's thesis |
| Yi Sin Goh             | 1 Independent Research                                         |
| Yashodra Khan          | 1 Independent Reading, 1 Independent Research                  |
| Kevonte Mitchell       | 1 Independent Reading, 1 Independent Research                  |
| Michelle Villavicencio | 1 Independent Research, Master's thesis                        |

**Undergraduate Students**

|                 |                                                                      |
|-----------------|----------------------------------------------------------------------|
| Michael Blecher | 2 Independent Research                                               |
| Ericka Boucard  | 1 Independent Research                                               |
| Esthena Brutten | 2 Independent Research, 1 Honors thesis, Scholars Program            |
| Rebecca Colon   | REU student (Research Experience for Undergraduates)                 |
| Elena Domingo   | 2 Independent Research, MARC (Maximizing Access to Research Careers) |

|                         |                                                                                             |
|-------------------------|---------------------------------------------------------------------------------------------|
| Ece Ersoy               | 1 Laboratory Experience, Honors thesis, Macaulay Honors                                     |
| Rochelle Hall           | REU student                                                                                 |
| Jonathan Hagler         | 2 Independent Research                                                                      |
| Wesley Huang            | Tow Presidential Mentee (1st cohort), 2 Laboratory Experience                               |
| Patrick Ihejirika       | 1 MARC (Maximizing Access to Research Careers), Honors thesis, Goldwater Scholarship winner |
| Austin Kaplan           | 2 Independent Research, Honors thesis                                                       |
| Walter Lai              | Volunteer research assistant                                                                |
| Shawn Lauzon            | 1 Independent Research                                                                      |
| Myrodati Lyrstis        | 1 Honors thesis, Scholars Program                                                           |
| Wing Jing Mak           | 1 Independent Research                                                                      |
| Shifa Maqsood           | Tow Presidential Mentee (2nd cohort), 1 Independent Research                                |
| Beni Mftidi             | 1 Independent Research                                                                      |
| Kendra Scarlett Reynoso | 1 Independent Reading                                                                       |
| Morena                  |                                                                                             |
| Konstantin Nestoiter    | 1 Independent Research                                                                      |
| Emily Paolillo          | 2 Independent Research, REU, Macaulay Honors Program                                        |
| Florina Petcu           | 1 Independent Research, CUNY BA                                                             |
| Mark Rayev              | 1 Laboratory Experience, Honors thesis, Macaulay Honors                                     |
| Ana Sanchez             | REU student                                                                                 |
| Marissa Scotto          | REU student                                                                                 |
| Chin Yen Tan            | 1 Independent Research                                                                      |
| Niles Uy                | 1 Laboratory Experience, 2 Independent Research, 1 Honors thesis                            |
| Hao Zhu                 | 1 Laboratory Experience, 1 Independent Research, CUNY BA                                    |

### Dissertation Committees

|      |                                                                                                                                |
|------|--------------------------------------------------------------------------------------------------------------------------------|
| 2023 | Committee member, dissertation defense (Janani Rajagopalan), Graduate Center of CUNY, New York, NY                             |
| 2022 | Committee member, dissertation defense (Kelly Cotton), Graduate Center of CUNY, New York, NY                                   |
| 2021 | Committee member, dissertation defense (Melissa Horger), Graduate Center of CUNY, New York, NY                                 |
| 2019 | Committee chair, dissertation defense (Nicholaus Brosowsky), Graduate Center of CUNY, New York, NY                             |
| 2017 | Committee member, dissertation defense (Daniel Meredith), Graduate Center of CUNY, New York, NY                                |
| 2016 | External reader, dissertation defense (Rachel Searston), School of Psychology, The University of Queensland, Australia         |
| 2016 | Committee member, dissertation defense (Natasha Nadler), Graduate Center of CUNY, New York, NY                                 |
| 2015 | Committee member, dissertation defense (Denise Pergolizzi), Graduate Center of CUNY, New York, NY                              |
| 2013 | Committee member, dissertation defense (Justin Ostrofsky), Graduate Center of CUNY, New York, NY                               |
| 2013 | External reader, dissertation defense (John McDonnell), Department of Psychology, New York University, New York, NY            |
| 2013 | External reader, dissertation defense (Maryem Torres-Quesada), Department of Psychology, University of Granada, Granada, Spain |
| 2012 | External reader, dissertation defense (Elena Cañadas), Department of Psychology, University of Granada, Granada, Spain         |

### TEACHING EXPERIENCE

OER refers to open educational resources authored by M. J. C. Crump. These are Creative Commons licensed resources that are free for students to use, and for others to copy, remix, and reuse.

### Undergraduate Courses

| Course    | Title                                                                                                                      | Notes                                       |
|-----------|----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| PSYC 2530 | Introduction to Cognitive Psychology <a href="https://www.crumplab.com/cognition/">https://www.crumplab.com/cognition/</a> | In-person, async, sync, large sections, OER |

| Course     | Title                                                                                                                                 | Notes                                                      |
|------------|---------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| PSYC 3400  | Statistical Methods in Psychological Research <a href="https://www.crumplab.com/statistics/">https://www.crumplab.com/statistics/</a> | Large sections, OER                                        |
| PSYC 3450W | Experimental Psychology <a href="https://www.crumplab.com/ResearchMethods/">https://www.crumplab.com/ResearchMethods/</a>             | Large sections, OER                                        |
| PSYC 3470  | Data Analytics and Data Visualization in the Social and Behavioral Sciences                                                           | OER                                                        |
| PSYC 3530  | Advanced Cognitive Psychology                                                                                                         |                                                            |
| PSYC 2001  | Laboratory Experiences                                                                                                                | Student mentoring                                          |
| PSYC 5001  | Independent Research I                                                                                                                | Student mentoring                                          |
| PSYC 5002  | Independent Research II                                                                                                               | Student mentoring                                          |
| PSYC 5003  | Independent Research III                                                                                                              | Student mentoring                                          |
| MCHC 1002  | Seminar 2: People of New York City                                                                                                    | Macaulay Honors College, outside the Psychology Department |

### Master's Courses

| Course     | Title                                                                                                                                                         | Notes             |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| PSYC 7765G | Statistical Methods Application I <a href="https://www.crumplab.com/rstatsforpsych/">https://www.crumplab.com/rstatsforpsych/</a>                             | OER               |
| PSYC 7766G | Statistical Methods Application II <a href="https://www.crumplab.com/rstatsmethods/">https://www.crumplab.com/rstatsmethods/</a>                              | OER               |
| PSYC 7709G | Special Topics: Using R for Reproducible Psychological Research <a href="https://www.crumplab.com/psyc7709_2019/">https://www.crumplab.com/psyc7709_2019/</a> | OER               |
| PSYC 7792G | Independent Reading                                                                                                                                           | Student mentoring |
| PSYC 7795G | Independent Psychological Research I                                                                                                                          | Student mentoring |
| PSYC 7796G | Independent Psychological Research II                                                                                                                         | Student mentoring |
| PSYC 7781G | Research in Psychology                                                                                                                                        | Master's theses   |

### Doctoral Courses

| Course     | Title                                                                                                                                                                      | Notes                       |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| PSYC 73800 | Cognitive Psychology                                                                                                                                                       | Course organizer            |
| PSYC 80200 | Independent Study                                                                                                                                                          | Student mentoring           |
| PSYC 80102 | Seminar in Special Topics: CCP Colloquium                                                                                                                                  |                             |
| PSYC 80103 | Special Topics: Computer Programming for Experimental Psychology <a href="https://www.crumplab.com/programmingforpsych/">https://www.crumplab.com/programmingforpsych/</a> | OER                         |
| PSYC 80103 | Special Topics: Cognitive Technologies: From Theory and Data to Application                                                                                                | OER                         |
| PSYC 80103 | Special Topics: Memory: Foundations and Current Issues                                                                                                                     | Co-taught with E. Chua      |
| PSYC 80103 | Special Topics Seminar: Learning and Attention                                                                                                                             | Co-taught with A. Delamater |
| PSYC 72400 | Career Development                                                                                                                                                         | Co-taught with E. Chua      |
| PSYC 90000 | Dissertation Supervision                                                                                                                                                   |                             |

### Teaching Certificates

- Effective Practice Framework certificate in effective college instruction, Association of College and University Educators and the American Council on Education (2020-2021). A 26-week course.