

Curriculum Vitae
JORDAN I. BARNES

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[Google Scholar](#)
[Research Gate](#)

Education

2022 - ABD, PhD (Experimental Psychology) - Simon Fraser University.
2012 - Master of Arts (Experimental Psychology) - Simon Fraser University.
2008 - Bachelor of Arts (Honours, Cognitive Science) - Simon Fraser University.
2003 - Associate of Arts (Criminology) - Kwantlen University College.

Academic Positions

2009 - 2021. Research Assistant (Cognitive Science Laboratory) - Simon Fraser University.
2016 - 2017. Teaching Assistant (Learning to Learn) - Simon Fraser University.
2016 - 2016. Teaching Assistant (Perception) - Simon Fraser University.
2013 - 2013. Teaching Assistant (Evolutionary Psychology) - Simon Fraser University.
2010 - 2012. Teaching Assistant (Introductory Psychology) - Simon Fraser University.
2008 - 2011. Teaching Assistant (Introductory Cognitive Science) - Simon Fraser University.

Peer-Reviewed Publications

- Barnes, J.I., Blair, M.R., Tupper, P. & Walshe, R.C. (2022). LAG-1: A dynamic, integrative model of learning, attention, and gaze. *PLoS One*. 17(3): e0259511. [10.1371/journal.pone.0259511](https://doi.org/10.1371/journal.pone.0259511) ([link to corrected pdf](#)).
- McColeman, C., Thompson, J., Anvari, N., Azmand, J., Barnes, J., Barrett, R., Byliris, R., Chen, Y., Dolguikh, K., Fischler, K., Harrison, S., Hayre, R., Poe, R., Swanson, L., Tracey, T., Volkanov, A., Woodruff, C., Zhang, R., Blair, M.R. (2020). Digit-Eyes: Learning-related Changes in Information Access in a Computer Game Parallel those of Oculomotor Attention in Laboratory Studies. *Attention, Perception, & Psychophysics*. [10.3758/s13414-020-02019-w](https://doi.org/10.3758/s13414-020-02019-w)
- Dolguikh, K., Barnes, J.I., Tracey, T., Woodruff, C., & Blair, M. (2019). How time spent on feedback influences learning and gaze in categorization training. In Noelle, D. C., Dale, R., Warlaumont, A. S., Yoshimi, J., Matlock, T., Jennings, C. D., & Maglio, P. P. (Eds.), *Proceedings of the 41st Annual Meeting of the Cognitive Science Society* (pp. 1661-1666). Austin, TX: Cognitive Science Society. [Poster](#).
- Jenkins, G., Barnes, J.I., Tupper, P. & Blair, M.R. (2017). A modeling link between cognitive and biological homeostasis. In Noelle, D. C., Dale, R., Warlaumont, A. S., Yoshimi, J., Matlock, T., Jennings, C. D., & Maglio, P. P. (Eds.), *Proceedings of the 39th Annual Meeting of the Cognitive Science Society* (pp. 588-593). Austin, TX: Cognitive Science Society. doi.org/10.31234/osf.io/8tkah.
- Barnes, J.I., Blair, M.R., Tupper, P. & Walshe, R.C. (2015). A dynamic neural field model of self-regulated eye movements during category learning. In Noelle, D. C., Dale, R., Warlaumont, A. S., Yoshimi, J., Matlock, T., Jennings, C. D., & Maglio, P. P. (Eds.), *Proceedings of the 37th Annual Meeting of the Cognitive Science Society* (pp. 148-153). Austin, TX: Cognitive Science Society. [Paper](#).

Barnes, J.I., McColeman, C.M., Stepanova, E., Blair, M.R. & Walshe, R.C. (2014). RLAttn: An actor-critic model of eye movements during category learning. In M. Knauff, M. Pauen, N. Sebanz, & I. Wachsmuth (Eds.), *Proceedings of the 35th Annual Conference of the Cognitive Science Society* (pp. 1892-1897). Austin, TX: Cognitive Science Society. [Paper](#).

McColeman, C.M., Barnes, J.I., Chen, L., Meier, K.M., Walshe, R.C., & Blair, M.R. (2014). Learning-induced changes in attentional allocation during categorization: A sizable catalog of attention change as measured by eye movements. *PLoS One*. 9(1). [10.1371/journal.pone.0083302](https://doi.org/10.1371/journal.pone.0083302)

Barnes, J. (2012). Measuring the Hebbian components of selective attention using eye-tracking and dynamic field theory. [Master's thesis, Simon Fraser University]. SFU Repository. https://summit.sfu.ca/_flysystem/fedora/sfu_migrate/12393/etd7373_JBarnes.pdf

Slaney, K. L., Storey, J. E., & Barnes, J. (2011). When “Good Enough” Is Just Not Good Enough: Response to Holden and Marjanovic. *International Journal of Forensic Mental Health*, 10(4), 290–294. [10.1080/14999013.2011.629716](https://doi.org/10.1080/14999013.2011.629716)

Slaney, K. L., Storey, J. E., & Barnes, J. (2011). Is My Test Valid? Guidelines for the Practicing Psychologist for Evaluating the Psychometric Properties of Measures. *International Journal of Forensic Mental Health*, 10(4), 261–283. [10.1080/14999013.2011.627086](https://doi.org/10.1080/14999013.2011.627086)

Blair, M.R., Walshe, C., Barnes, J.I., & Chen, L. (2011). Rethinking the role of error in attentional learning. In L. Carlson, C. Hölscher, & T. Shipley (Eds.), *Proceedings of the 33rd Annual Meeting of the Cognitive Science Society* (pp. 1649-1655). Austin, TX: Cognitive Science Society. [Talk](#).

*Barnes, J.I. (2009). Fluid Learning. *Indiana Undergraduate Journal of Cognitive Science*, 4, 42 - 53. [Paper](#).

Conferences

Dolguikh, K., Barnes, J. I., Tracey, T., & Blair, M. R. (2019). Time spent on feedback influences learning and gaze. *Northwest Conference on Cognition and Memory at the University of Victoria*. Poster.

Dolguikh, K., Barnes, J. I., McColeman, C. M., Chen, Y., Boorman, N., & Blair, M. R. (2018). Time on feedback during learning. *Northwest Conference on Cognition and Memory at the Kwantlen Polytechnic University*. Poster.

Blair, M.R., Barnes, J.I., Walshe, R.C., & Tupper, P. (2016). *Tempus, a New Model of Learning and Attention in Categorization that Is Active, Neural and Temporal*. The 57th Meeting of the Psychonomic Society. Boston, MA. Talk.

McIntyre, D.L., Harrison, S.M., Wang H., Barnes J.I. & Blair, M.R. (2016). How are covert attention and learning related? *Northwest Conference on Cognition and Memory at the University of British Columbia*. Poster.

Barnes, J.I., Blair, M.R., Tupper, P. & Walshe, R.C. (2015). A dynamic neural field model of self-regulated eye movements during category learning. In Noelle, D. C., Dale, R., Warlaumont, A. S., Yoshimi, J., Matlock, T., Jennings, C. D., & Maglio, P. P. (Eds.), *Proceedings of the 37th Annual Meeting of the Cognitive Science Society* (pp. 148-153). Austin, TX: Cognitive Science Society. [Poster](#).

Barnes, J.I., McColeman, C.M., Stepanova, E., Blair, M.R. & Walshe, R.C. (2014). RLAttn: An actor-critic model of eye movements during category learning. In M. Knauff, M. Pauen, N. Sebanz, & I. Wachsmuth (Eds.), *Proceedings of the 35th Annual Conference of the Cognitive Science Society* (pp. 1892-1897). Austin, TX: Cognitive Science Society. [Poster](#). [Updated location](#).

Barnes, J.I. (2014). Associations Between Population Coded Information Open Up The Possibility Of Category Fields. Paper presented at the *75th Annual Canadian Psychological Association Conference*. Vancouver, Canada. [Talk](#).

Barnes, J.I., & Blair, M.R. (2014). The Influence of Space and Relevance on Eye Movement Distributions. Poster presented at the *Northwest Conference on Cognition and Memory*. University of Victoria, Canada. [Poster](#).

Barnes, J.I., Walshe, R.C., Tupper, P.F., & Blair, M.R. (2013) A dynamic neural field model of eye movements during category learning tasks. Poster presented at *Learning to Attend, Attending to Learn: Neurological, Behavioral, and Computational Perspectives*. San Diego, USA. [Poster](#).

Barnes, J.I., Blair, M.R., Tupper, P.F., & Walshe, R.C. (2013) Adult Category Learning Differences Predicted by a Dynamic Neural Field Theory Account of Information Sampled from the Fovea. *Proceedings of the 34th Annual Meeting of the Cognitive Science Society*. [Member abstract/poster](#).

Barnes, J.I., Blair, M.R., Walshe, R.C., Chen, L., & McColeman, C. (2011). Modeling the relationship between error and attention. *Northwest Conference on Cognition and Memory* at the University of British Columbia. Talk.

*Barnes, J.I. Fluid Learning. (2009). *Northwest Conference on Cognition and Memory* at the University of Victoria. Poster.

Contributions

2018. Journal reviewer for *Theory & Psychology*.

2023. Journal reviewer for *Attention, Perception, & Psychophysics*.

Awards

2019 - 2020. National Science and Engineering Research Council - Engage. \$10,000.

2019 - 2019. Simon Fraser University Graduate Fellowship. \$6,500.

2018 - 2018. Simon Fraser University Graduate Fellowship. \$6,500.

2017 - 2017. Simon Fraser University Graduate Fellowship. \$6,500.

2016 - 2016. Simon Fraser University Graduate Fellowship. \$3,250.

2013 - 2015. National Science and Engineering Research Council - PGSD. \$63,000.

2012 - 2013. Simon Fraser University Graduate Fellowship. \$6,250.

2010 - 2011. Mathematics of Information Technology and Complex Systems (MITACS) - Accelerate BC internship. \$12,000.

Affiliations

2013 - 2018. Cognitive Science Society.

Professional experience

2021 - Presented Psychology department area (History, Quantitative, Theory) seminar: *Designing and modeling experiments using the principles of Dynamic Field Theory*. Simon Fraser University, Canada.

2019 - Presented Psychology department area (History, Quantitative, Theory) seminar: *The Dawning of the age of COMPROP*. Simon Fraser University, Canada.

2014 - Presented Psychology department area (History, Quantitative, Theory) seminar: *Modeling Neural Population Codes Using Dynamic Neural Field Theory*. Simon Fraser University, Canada.

2014 - Attended *Neuronal Dynamics Approaches to Cognitive Robotics* Summer school. Institut für Neuroinformatik, Ruhr-Universität. Bochum, Germany.

2013 - Graduate mentor for *Robots and neuronal systems* workshop based on the IQR framework for neural robotics. Simon Fraser University, Canada.

* work presented as an undergraduate.