

Brent Pitchford

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ACADEMIC EMPLOYMENT

- 2025-present **Postdoctoral Researcher**, Hoplab and Mathlab, KU Leuven (Hans Op de Beeck & Bert De Smedt)
- 2023-2025 **Postdoctoral Researcher**, Icelandic Vision Lab, University of Iceland (Heida Maria Sigurdardottir)

EDUCATION

- 2018-2023 **PhD, Behavioural and Cognitive Neuroscience**
Brock University
Thesis: *The Influence of Reward Associations in the Facilitation and Impairment of Attention and Conflict Processing*
Supervisor: Karen Arnell
- 2016-2018 **MA, Behavioural and Cognitive Neuroscience**
Brock University
Thesis: *Self-Control and its Influence on Global/Local Processing: An Investigation of the Role of Frontal Alpha Asymmetry and Dispositional Approach Tendencies*
Supervisor: Karen Arnell
- 2012-2016 **BSc, Psychology**
Carleton University, High Distinction
Thesis: *Uh, Um... The Distinctive Usage of Filled Pauses in Psychopathic Young Offenders' Speech*
Supervisor: John Logan

RESEARCH FELLOWSHIPS AND SCHOLARSHIPS

- 2019-2022 **Alexander Graham Bell Canada Graduate Scholarship (Doctoral)**
National Science and Engineering Research Council (\$105,000 CAD)
- 2019-2020 **Ontario Graduate Scholarship**
Government of Ontario (\$15,000 CAD; Declined)
- 2018-2019 **Ontario Graduate Scholarship**
Government of Ontario (\$15,000 CAD)
- 2017-2018 **Ontario Graduate Scholarship**
Government of Ontario (\$15,000 CAD; Declined)

2017-2018	Alexander Graham Bell - Canada Graduate Scholarship (Master's) National Science and Engineering Research Council (\$17,500 CAD)
2017	Spring Research Fellowship Department of Graduate Studies (\$4000 CAD)
2016-2017	Research Fellowship Faculty of Graduate Studies (\$2000 CAD)
2016-2017	Research Fellowship Attention Lab (\$2000 CAD)
2016-2017	Graduate Fellowship Attention Lab (\$5000 CAD)

HONOURS AND AWARDS

2023	Distinguished Graduate Award Brock University (\$100 CAD)
2021	Library Open Access Publishing Fund Brock University Library (\$1500 CAD)
2018	Certificate of Academic Excellence 2018 – Master's Thesis Canadian Psychological Association
2018-2019	Entrance Scholarship (PHD) Department of Graduate Studies (\$2000 CAD)
2017-2018	Excellence Scholarship Department of Graduate Studies (\$5000 CAD)
2016-2017	Entrance Scholarship (MA) Department of Graduate Studies (\$2000 CAD)
2012-2015	Entrance Scholarship Carleton University (\$4000 CAD)
2013-2016	Deans' Honour List Carleton University

PEER-REVIEWED PUBLICATIONS

- Pitchford, B. & Arnell, K. M. (2023).** Evaluating individual differences in rewarded Stroop: reliability and associations with self-report measures. *Psychological Research*, 87, 686–703.
- Pitchford, B. & Arnell, K.M. (2021).** Individual differences in attentional breadth changes over time: An event-related potential investigation. *Frontiers in Psychology*, 12, 1-12.
- Pitchford, B. & Arnell, K.M. (2019).** Resting EEG in alpha and beta bands predicts individual differences in attentional breadth. *Consciousness and Cognition*, 75, 102803.
- Pitchford, B. & Arnell, K.M. (2019).** Self-control and its influence on global/local processing: An investigation of the role of frontal alpha asymmetry and dispositional approach tendencies. *Attention, Perception, & Psychophysics*, 81(1), 173-187.
- Pitchford, B. & Arnell, K.M. (2019).** Speech of young offenders as a function of their psychopathic tendencies. *Canadian Journal of Experimental Psychology*, 73(3), 193-201.

MANUSCRIPTS UNDER REVIEW AND IN PREPARATION

*denotes student mentee, ** shared first authorship, *** shared last authorship

Ólafsdóttir, I. M., **Pitchford, B.**, Maeekalle, M.*, & Sigurdardóttir, H. M. (under review). Why is a raven like a writing desk? The interplay of visual and semantic characteristics of animacy in object perception. Manuscript under review at Psychological Science (PSCI-24-1076). Preprint: <https://doi.org/10.31234/osf.io/szvhw>

Pitchford, B.**, Devillez H.**, & Sigurdardóttir, H. M. (under review). Distinct neural processing underlying visual face and object perception in dyslexia. Manuscript under review at Neuropsychologia (NSY-D-24-00559). Preprint: <https://doi.org/10.31234/osf.io/6zqu4>

Pitchford, B. & Arnell, K.M. (under review). An examination of how reward associations facilitate and impair Stroop performance. Manuscript under review at Psychological Research (21e46864-0a2a-4197-8ca1-bde8e54579b5). Preprint: https://psyarxiv.com/36gp7_v2

Pitchford, B. & Arnell, K. M. (in prep). Classical conditioning and not transference explains the interference by reward associations.

Maeekalle, M.*, Ólafsdóttir, I. M., **Pitchford, B.***** & Sigurdardóttir, H. M.*** (in prep). Mapping and tracking object representations: Exploring the contribution of visual and semantic information.

CONFERENCE PRESENTATIONS

*denotes student mentee

Pitchford, B., Ólafsdóttir, I. M., Maeekalle*, M., & Sigurdardóttir, H. M. (2024, May). *The contribution of features, shape, and semantics to object similarity*. Poster presented at Vision Sciences Society (VSS), St. Pete Beach, Florida.

Pitchford, B. & Arnell, K. M. (2023, February). *Impairment of Stroop performance by reward associations requires congruent trials*. Poster presented at Lake Ontario Visionary Establishment (LOVE) annual meeting, Niagara Falls, Ontario.

Pitchford, B. Baker, K. A., Mondloch, C. J., & Arnell, K. M. (2022, November). *Does the other-race effect require attention? An investigation using the attentional blink*. Poster presented at Object Perception, visual Attention, and visual Memory (OPAM) annual meeting, Boston, Massachusetts.

Pitchford, B. & Arnell, K. M. (2022, May). *The influence of large and small reward associations on Stroop performance in rewarded and nonrewarded contexts*. Poster presented at Vision Sciences Society (VSS), St. Pete Beach, Florida.

Pitchford, B. & Arnell, K. M. (2019, September). *High approach-motivated versus low approach-motivated positive affect following self-control: The relation between ERPs and attentional breadth*. Poster presented at Society of Psychophysiological Research (SPR) annual meeting, Washington, D.C.

Pitchford, B. & Arnell, K. M. (2018, November). *Resting EEG in alpha and beta bands predicts*

individual differences in global/local processing. Poster presented at Object Perception, visual Attention, and visual Memory (OPAM) annual meeting, New Orleans, Louisiana.

Pitchford, B. & Arnell, K. M. (2018, October). *Investigating changes in attentional breadth following self-control: An ERP study*. Poster presented at Society of Psychophysiological Research (SPR) annual meeting, Quebec City, Quebec.

Pitchford, B. & Arnell, K. M. (2018, May). *Approach motivation and narrowed attentional breadth following self-control: Investigating the role of asymmetrical frontal activity*. Poster presented at Vision Sciences Society (VSS), St. Pete Beach, Florida.

Pitchford, B. & Arnell, K. M. (2017, May). *Executive control processes can narrow attention for those with high approach tendencies*. Poster presented at Vision Sciences Society (VSS), St. Pete Beach, Florida.

Pitchford, B. & Arnell, K. M. (2017, May). *Forest for the trees after inhibiting prepotent responses: The association between reward responsiveness and local focus*. Poster presented at Southern Ontario Neuroscience Association (SONA), Brock University, St. Catharines, ON.

Pitchford, B. & Logan, J. (2016, June). *Uh, Um... The distinctive usage of filled pauses in psychopathic young offenders' speech*. Poster presented at 2016 Canadian Society for Brain, Behaviour, and Cognitive Science Conference, University of Ottawa, Ottawa, ON.

ORAL PRESENTATIONS

Pitchford, B., Ólafsdóttir, I.M., Maeekalle, M., & Sigurdardóttir, H.M. (2024, May). Contributions of visual and semantic information in object discrimination. Talk presented at Different Minds Collaborative (DMC) meeting, online.

Pitchford, B., Ólafsdóttir, I. M., Maeekalle, M.*, & Sigurdardóttir, H. M. (2024, March). *Can object similarity be explained by shape or featural information?* Talk presented at Annual Icelandic Vision Meeting, Hvammstangi, Iceland.

Maeekalle, M.*, Ólafsdóttir, I. M., **Pitchford, B.**, & Sigurdardóttir, H. M. (2024, March). *Disentangling semantics, high-, mid- and low-level visual information important for object discrimination, using CORnet*. Talk presented at Annual Icelandic Vision Meeting, Hvammstangi, Iceland.

Friðriksdóttir, D.*, Ovchinnikova, I., **Pitchford, B.**, Devillez, H., & Sigurdardóttir, H. M. (2024, March). *Project proposal: Neural measures of high-level visual processing in developmental prosopagnosia*. Talk presented at Annual Icelandic Vision Meeting, Hvammstangi, Iceland.

Pitchford, B. & Arnell, K. M. (2021, June). *Individual differences in how reward associations affect Stroop performance*. Talk presented at Canadian Society for Brain, Behaviour and Cognitive Science (CSBBCS), Virtual Event.

Pitchford, B. (2019). Can resting EEG predict individual differences in attentional breadth? Talk presented at Brock Revolutionary Exploratory Workshops on Topics Related to Psychological Science: Data Blitz, Brock University, St. Catharines, ON.

Pitchford, B. (2017). Seeing “more of the trees” after inhibiting prepotent responses. Talk presented at Brock Revolutionary Exploratory Workshops on Topics Related to Psychological Science: Data Blitz, Brock University, St. Catharines, ON.

TEACHING EXPERIENCE

Teaching Apprenticeship

Fall 2020 **Teaching Apprenticeship, Brock University**
Participated in the development and delivery of third-year statistics in psychology (Computer Data Analysis). Designed and delivered lectures, created assignments and questions, all of which were based on lecture content.

Teaching Assistantships

Fall 2018-2022 **Teaching Assistant, Brock University**
Course: Computer Data Analysis (PSYC 3P39)
Helped students with assignments for one hour following each lecture; marked weekly assignments; provided substantial feedback on writing and data analyses; worked one-on-one with students to help them with assignments/exam material

Winter 2019 **Course Coordinator/Teaching Assistant, Brock University**
Winter 2018 Course: Personality (PSYC 2P25)
& Winter 2021 *Primary instructor for two seminars/week; facilitated class discussions and activities; marked written assignments; completed administrative tasks*

Fall 2017 **Lab Demonstrator and Instructor, Brock University**
& Winter 2017 & Course: Cognition (PSYC 2P20)
Winter 2020 & *Primary instructor for two computer lab sessions/week; delivered lectures and guided students through cognitive experiments; facilitated class discussions; marked assignments*
Winter 2022

Fall 2016 **Teaching Assistant, Brock University**
Course: Health Psychology (PSYC 3P51)
Primary instructor for two seminars/week; facilitated class discussions and activities; marked oral presentations and written assignments/exams

MENTORING EXPERIENCE

2024 Supervised independent project – G. Gunnarsson
2023 - 2024 Supervised master’s thesis – M. Maeekalle
2023 Supervised independent project – S. Jóhannsdóttir

PROFESSIONAL DEVELOPMENT

August 6-16, **Summer Institute for Computational Social Science**
2024 Instructional program involving group problem sets, and participant-led

research projects in computational social science. Topics covered included machine learning, network analysis, and digital experiments, as well as ethics, validity, and the role of theory in computational research.

- April 23-27, 2018 **Brock University & SHARCNet: EEG Analysis Workshop**
EEG analysis workshop was allowing for hands-on experience exploring advanced EEG analysis methods in a collaborative setting.
- April 10, 2018 **Advanced TA Certificate in Teaching in Higher Education**
Certificate awarded for the completion of teaching workshops (e.g., *working with international students, using online resources for TAing*) and completion of a statement of teaching philosophy.
- April 10, 2017 **TA Certificate in Teaching and Learning in Higher Education**
Certificate awarded for the completion of teaching workshops.
- March 25-26, 2017 **Software Carpentry at Brock University: BASH, GIT, Octave/Matlab**
Hands-on workshop covering basic concepts and tools, including program design, version control, data management, and task automation.

ACADEMIC AND ADMINISTRATIVE EXPERIENCE

AD Hoc Reviewer

2021-present Attention, Perception, & Psychophysics; Behavior Research Methods; Clinical Interventions in Aging; Journal of Experimental Psychology: Human Perception and Performance

2014–2016 **Vice President of Finance**
Psychology Society of Carleton University

PROFESSIONAL MEMBERSHIPS

- Vision Sciences Society (VSS)
- Canadian Society of Brain, Behaviour, and Cognitive Science (CBBCS)
- Society of Psychophysiological Research (SPR)
- Psychonomics Society

REFERENCES

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