CHANTAL LEMIEUX, Ph.D.

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Canadian citizen fluent in both official languages

SUMMARY

Areas of Research Interest

→ Spatial Cognition, Metacognition, Gender Differences, Eyetracking and Face Perception

Education

- → PhD in Experimental Psychology and undergraduate degree in Psychology with minor in Philosophy from the University of Ottawa.
 - → Doctoral thesis title: "Metacognitive aspects of gender differences in spatial navigation"
 - → Advanced knowledge of quantitative and qualitative statistical analyses
 - → Experience with various quantitative research methodologies and tools including eye-tracking, virtual reality, EEG/ERP, E-Prime, Matlab, physiological measures (e.g., HRV, BP, GSC, EMG)

→ Teaching experience (5 years)

- → Part-Time Professor at KPU since 2021
- → Part-Time Professor at the University of Ottawa since 2016
- → Extensive experience using D2L Brightspace and Moodle online teaching tools
- → Extensive experience using Adobe Connect and Zoom for synchronous lectures
- → Teaching Assistant for 9 lab-based undergraduate courses
- → Experience co-supervising 5 undergraduate students for their honours thesis projects.
- → 4 years of experience teaching a full time one-week mini course for high school students entitled "Jed-Eye Mind Tricks"

Research experience (9 years)

- → 9 peer-reviewed publications, 3 upcoming manuscripts
- → Experience leading and coordinating a variety of research projects in the fields of perception, cognition, psychophysics, and neurocognition (see publication list).
- → Experience writing scholarship and grant applications.
- → Experience with public speaking and presenting research at several national and international scientific conferences.
- → Over 3 years of experience doing health and social sciences research in two departments of the Canadian Federal Government

EDUCATION

Ph.D. Experimental Psychology (March 2018)

University of Ottawa, Ottawa, Canada

Thesis Title: "Metacognitive aspects of gender differences in spatial navigation"

B.A. with Honours Specialization in Psychology and minor in Philosophy (April 2010)

University of Ottawa Ottawa, Canada

Thesis Title: "Driving assessment through virtual reality: A comparison of two simulated driving platforms"

TEACHING AND SUPERVISION

2021 – pres Part-Time Professor, Kwantlen Polytechnic University

- PSYC3303 Learning: Theory and Practice
- Online synchronous course
- Professor evaluation score average of 4.9/5

2016 - pres Part-Time Professor, uOttawa

- PSY 31/3508 Perception (French and English)
- PSY 31/3503 Learning and Conditioning (French and English)
- PSY 3791 Special Topics in Psychology: Visual Cognition (In French)
- Creating engaging and fun class demonstrations (ex: illusions, physical concepts)
- Professor evaluation scores (P-report, averages between 3.3/5 and 4.4/5)

2015 - 2018 Enrichment Mini Course Professor, uOttawa

"Jed-Eve Mind Tricks: Illusions and Perception"

Creating material for 5 days (9am - 3pm) suited for high school students

2012 - 2016 Honors Thesis Student Assistant Supervisor (5 Students), uOttawa

Supervisor: Dr. Charles Collin, University of Ottawa

- Helping in the design and implementation of an honors student's project.
- Gave formal training on data collection as well as data cleaning and analysis.

2010 - 2015 Teaching Assistant, uOttawa

- PSY3108 Perception
- PSY3103 Learning and Conditioning
- PSY2174/2574 Research Methods and Ethics (French and English)
- PSY4727 Sleep and Dreams (French)
- PSY2701 Biological Foundations of Behaviour (French)
- PSY3122 Human Sexual Behavior

2013 - 2018 **Grad Student Senior Mentor (5 Students)**

Graduate Association of Students in Psychology (GASP) at uOttawa

Mentoring graduate students as they are introduced into the program

2013 - 2015 **Grad Mentor Speaker**

Graduate Association of Students in Psychology (GASP) at uOttawa

Lead a discussion group with undergraduate students about graduate school

RESEARCH EXPERIENCE

2018 - 2020 **Post-Doctoral Researcher**

Perception and Cognition Laboratory (now Visual Cognition Research Lab),

University of Ottawa

Supervisor: Charles Collin, Ph.D.

Fall 2018 Research Assistant

Centre for Applied Cognitive Research, Carleton University

Supervisor: Guy Lacroix, PhD

2017 - 2018 **Research Analyst**

Health Promotion and Chronic Disease Prevention Branch, Public Health Agency of Canada

• Experience with the diabetes prevention and health equity scientific literature and statistical analyses including logistic regression and ROC curve analyses using SAS.

2010 - 2018 Research Assistant – Graduate Student

Perception and Cognition Laboratory, University of Ottawa

Supervisor: Charles Collin, Ph.D.

2016 - 2017 **Research Analyst**

Director General Military Personnel Research and Analysis, Department of National Defense

Survey development, implementation, and analysis (psychometrics)

Research Assistant and Laboratory Coordinator 2012 - 2014

INSPIRE Laboratory, University of Ottawa

Supervisor: Simon Beaudry, PhD and Luc Pelletier, PhD

Lead several varying training seminars on Mindware Technologies equipment including EMG, GSC, ECG, BP, HR, and EEG, as well as on SR Research's Eyelink II and 1000 eye-tracker.

2009 - 2010 **Honours Student and Research Assistant**

Cognitive Aging Laboratory, University of Ottawa

Supervisor: Sylvain Gagnon, Ph.D.

PROFESSIONAL DEVELOPMENT

2020 (Summer	Techno-Pedagogy Webinar Series Teaching and Learning Support Service, uOttawa
2020 (Winter)	Adobe Connect E-Class Contact North and uOttawa
2019 (Winter)	Virtual Campus Brightspace D2L Workshop Series Teaching and Learning Support Services, uOttawa
2017 (Feb)	SAS Basic and Intermediate Workshop, Ottawa, ON Social Determinants and Applied Research, Public Health Agency of Canada
2015 (Nov)	SPSS Syntax Basic and Intermediate Workshop, Ottawa, ON School of Psychology, University of Ottawa
2014 (Sept)	Eprime Basic and Intermediate Webinar Workshop, Ottawa, ON Psychology Software Tools
2014 (June)	Mindware Technologies Seminar, Columbus, Ohio Heart Rate Variability Keynote Speaker: Dr. Gary Berntson
2013 (June)	Mindware Technologies Seminar, Columbus, Ohio Impedance Cardiography Keynote Speaker: Dr. Gary Berntson
2012 (Sept)	Eyelink 1000 Basic and Intermediate Seminar, Ottawa, ON SR Research ltd.
2012 (July)	Eyelink II Intermediate Seminar, Ottawa, ON SR Research ltd.
2011 (May)	Eyelink II Basic Seminar, Ottawa, ON SR Research ltd.
2011- 2012	Basic Matlab and Psych Toolbox Course Dr Charles Collin, University of Ottawa
2013 (Fall)	Theory and Practice of Undergraduate Teaching Course (ESG5300)

MANUSCRIPTS IN PREPARATION (3)

- Lemieux, C.L., Collin, C.A., & Watier, N. (under review) Gender Differences in Judgments of Learning and Retrospective Confidence in a First-Person Virtual Maze Learning Task. Manuscript submitted to the *Journal of Cognitive Psychology*.
- Lemieux, C.L., Collin, C.A., & Watier, N. (in prep) Effects of Stereotype Activation on Gender Differences in Metacognitive Accuracy and Navigation Performance. Manuscript in preparation for submission to the journal Sex Roles.
- Lemieux, C.L., Shah, D., Collin, C.A., Hamm, J., Large, M.E., Campbell, K. (in prep) ERP Component Analysis of Basic and Subordinate Category Object Naming Depending on Mental Rotation. Manuscript in preparation for submission to Brain and Cognition.

PEER REVIEWED PUBLICATIONS (9)

- Lemieux, C., De Groh, M., Gibbons, L., Morrison, H., Jiang, Y. (2020) A Tool to Assess Risk of Type 2 Diabetes in Canadian Adults. Canadian Journal of Diabetes (44), 445-447. doi: 10.1016/j.jcjd.2020.03.002
- Lemieux, C.L., Collin, C.A., & Watier, N. (2019) Gender Differences in Metacognitive Judgments and Performance on a Goal-Directed Wayfinding Task. Journal of Cognitive Psychology 31(4), 453 - 466. doi: 10.1080/20445911.2019.1625905
- Agarwal, G., Jiang, Y., Lemieux, C., Rogers Van Katwyk, S., Mao, Y., Mao, Y., Orpana, H., Fong, M., Morrison, H. (2018). Effectiveness of the CANRISK tool in the identification of dysglycemia in a Canadian South Asian Population. Health Promotion and Chronic Disease Prevention, 38(7/8), 290-298. doi: 10.24095/hpcdp.38.7/8.03
- Agarwal, G., Jiang, Y., Rogers Van Katwyk, S., **Lemieux, C.,** Orpana, H., Mao, Y., Hanley, B., Davis, K., Leuschen, L., Morrison, H. (2018) Effectiveness of the CANRISK tool in the identification of dysglycemia in First Nations and Métis in Canada. Health Promotion and Chronic Disease Prevention, 38(4), 55-63. doi: 10.24095/hpcdp.38.2.02
- Booth, R., Jiang, Y., Morrison, H., Orpana, H., Rogers Van Katwyk, S., Lemieux, C. (2018) Ethnic dependent differences in diagnostic accuracy of glycated hemoglobin (HbA1c) in Canadian adults. Diabetes Research and Clinical Practice, 136, 143-149. doi: 10.1016/j.diabres.2017.11.035.
- Boutet, I., Lemieux, C. L., Goulet, M. A., & Collin, C. A. (2017). Faces elicit different scanning patterns depending on task demands. Attention, Perception, & Psychophysics, 79(4). 1050-1063. doi: 10.3758/s13414-017-1284-y.

- Stinchcombe, A., Kadulina, Y., **Lemieux, C.**, Aljied, R., & Gagnon, S. (2017). Driving is not a game: Video game experience is associated with risk-taking behaviours in the driving simulator. *Computers in Human Behavior*, 69, 415-420. doi: 10.1016/j.chb.2016.12.006
- **Lemieux, C.L.**, Collin, C.A, & Nelson, E.A (2015) Modulations of Eye Movement Patterns by Spatial Filtering During the Learning and Testing Phases of an Old/New Face Recognition Task. *Attention, Perception, & Psychophysics*, 77(2), 536 550. doi: 10.3758/s13414-014-0778-0.
- **Lemieux, C. L.**, Stinchcombe, A., Gagnon, S., & Bédard, M. (2014) Comparing driving performance on 'Low' Level Fidelity Desktop' and 'Mid' Level Fidelity' driving simulators. *Advances in Transportation* Studies, *34*, 33-42. doi:10.4399/97888548767434

CONFERENCE PRESENTATIONS (15)

- Lemieux, C.L., Watier, N., Collin, C.A. (2018, Sept). Effects of Stereotype Activation on Gender Differences in Performance and Metacognition during A First-Person Virtual Maze Learning Task. Poster presented at the International Spatial Cognition Conference, Rome, Italy.
- Ying, J., Lemieux, C.L., Rogers Van Katwyk, S., Morrison, H., Orpana, H., Hanley, B., Davis, K. Fong, M. (2017, June) *Using CANRISK to identify dysglycemia risk in Canada's Multi-ethnic population*. Poster presented at the American Diabetes Association's 77th Scientific Session, San Diego, CA.
- Ying, J., **Lemieux, C.L.**, Rogers Van Katwyk, S., Morrison, H., <u>Orpana, H.</u>, Davis, K. Fong, M. (2017, June) *Effectiveness of CANRISK in assessing dysglycemia risk in Canadians aged 20-39 years including three high-risk ethnic groups.* Poster presented at the Canadian Public Health Association's annual conference, Halifax, Canada.
- Peach, J. M., Squires, E. C., & Lemieux, C. L. (2016, April). *Military leadership and members' morale, identification, and intentions to stay.* Poster presented at the 31st Annual Conference of the Society for Industrial and Organizational Psychology, Anaheim, CA.
- Peach, J., Squires, E., & Lemieux, C.L. (2016, April) *Impact of military leadership on work stress, morale, identification and intentions.* Poster presented at the 31st Annual Conference of the Society for Industrial and Organizational Psychology, Anaheim, CA.
- <u>Lemieux, C.L.</u>, Boutet, I., Goulet, M-A., & Collin, C.A. (2016, June). *Gaze patterns elicited during configural and featural face processing.* Poster presented at the 26th Annual Meeting of the Canadian Society for Brain, Behaviour and Cognitive Science, Ottawa, Ontario.

- <u>Peach, J. M.,</u> Squires, E. C., & **Lemieux, C. L.** (2016, October). *Military leadership and members' morale, identification, and intentions to stay.* Presented at the Health and Wellness Fair. Ottawa, Canada
- <u>Lemieux, C.L.</u>, Watier, N., Collin, C.A. (2015, Sept). *Gender Differences When Manipulating Confidence During A First-Person Virtual Maze Learning Task.* Poster presented at the VI International Spatial Cognition Conference, Rome, Italy.
- Collin, C., Lemieux, C., Watier, N.N. (2015, June). Gender differences in metacognitive judgements of navigational learning. Poster presented at the 25th Annual Meeting of the Canadian Society for Brain, Behaviour and Cognitive Science, Ottawa, Canada.
- Goulet, M.A., Lemieux, C.L., & Collin, C.A. (2015). Eye movements during detection of configural and featural changes in faces: Conscious strategies differ, but automatic processes do not. Talk presented at The Canadian Psychological Association's 76th Annual Convention, Ottawa, Canada.
- <u>Lemieux, C.L.</u>, Watier, N., Collin, C.A. (2014, Sept). *Gender Differences in Metacognitive Judgments during a First-Person Virtual Maze Learning Task*. Poster presented at the 6th biannual international Spatial Cognition Conference, Bremen, Germany.
- <u>Lemieux, C.L.,</u> Nelson, E.A., & Collin, C.A. (2013, May). *Eye Movement Patterns Suggest Different Facial Features are Most Informative at Different Spatial Frequencies.* Poster presented at the 13th annual meeting of the Vision Sciences Society, Naples, Florida.
- Nelson, E.A., Lemieux, C.L., & Collin, C.A. (2012). Low and High Spatial Frequencies Respectively Elicit Holistic and Featural Eye Movement Patterns in Face Recognition, Poster Presented at the 28th International Society of Psychophysics Annual Meeting, Ottawa, Canada.
- <u>Lemieux, C.L.,</u> Nelson, E. A., & Collin, C.A. (2012, September) *Tracking Eye Movements While Encoding Faces.* Poster presented at the European Conference on Visual Perception, Sardinia, Italy.
- <u>Lemieux, C.L.,</u> Nelson, E.A., & Collin, C.A. (2012, June) Low and High Spatial Frequencies Respectively Elicit Holistic and Featural Eye Movement Patterns in Face Recognition. Poster presented at the Canadian Society for Brain, Behaviour and Cognitive Science, Kingston, Canada.