

Rebekka Lagacé-Cusiac

Western Interdisciplinary Research Building (WIRB)
1151 Richmond Street North London, ON N6A 5B7
rlagacec@uwo.ca; rebekka.lagace-cusiac@hotmail.com

Education

Ph.D. in Psychology Supervised by Daniel Ansari and Jessica Grahn University of Western Ontario	2021-present
M.Sc. in Psychology University of Western Ontario	2019-2021
B.Sc. in Cognitive Neuroscience Université de Montréal	2016-2019
Double DCS (Diploma of College Studies) Natural sciences & Classical Music (Alto Saxophone) Lionel-Groulx College	2013-2016

Honors, Awards & Competitions

NSERC Post-Graduate Scholarship Doctoral Award (National, 25 000\$)	2023-2025
Ontario Graduate Scholarship Award (Provincial, 15 000\$, declined)	2023
G. Keith Humphrey Memorial Award (Institutional, 650\$)	2022
Dean's honor list, Université de Montréal	2017-2019
Mathematics competition, Association Mathématique du Québec (AMQ) <i>Results: 2nd out of 47 within college, 56th out of 244 within province</i>	2015
<i>Results: 57th out of 161 within province</i>	2014
Canadian Senior Mathematics Contest, Centre for Education in Math and Computing (CEMC) <i>Results: 876th out of 9609 (89th percentile)</i>	2014

Publications

Articles

- Lau, N., Wilkey, E., **Lagace-Cusiac, R.**, Ansari, D. (Submitted). Do Different Non-Symbolic Number Comparison Tasks Point to a Unified “Approximate Number System” Construct? A Measurement Study
- Nguyen, T., **Lagacé-Cusiac, R.**, Everling, J. C., Henry, M. J., Grahn, J. A. (Submitted). Audiovisual Integration of Rhythm in Musicians and Dancers.

Lagacé-Cusiac, R., Tremblay, P. F., Ansari, D., Grahn, J. (2023). Investigating the relationships between temporal and spatial ratio estimation and magnitude discrimination using SEM: Evidence for a common ratio processing system. *Journal of Experimental Psychology: Human Perception and Performance*, 49(1), 108–128. <https://doi.org/10.1037/xhp0001062>

Lau, N. T. T., Wilkey, E. D., Soltanlou, M., **Lagacé Cusiac, R.**, Peters, L., Tremblay, P., ... Ansari, D. (2022). Numeracy and COVID-19: examining interrelationships between numeracy, health numeracy and behaviour. *Royal Society Open Science*, 9(3), 201303–201303. <https://doi.org/10.1098/rsos.201303>

Talks

Kinghorn, E.*, **Lagacé Cusiac, R.***, Demirkaplan, O., Grahn, J. A., De Souza, J., Carter, C. (July, 2021). The effects of blocked and interleaved practice on musical style recognition. ICMPC-ESCOM. University of Nottingham, Nottingham, UK. [Online].

Posters

Lagacé-Cusiac, R.*, Grahn, J., Ansari, D. Neural representation of discrete and continuous ratios in the visual and parietal cortex: A preregistered report. *Mathematical Cognition and Learning Society*. June 6-8, 2023. University of Loughborough, Loughborough, UK.

Lagacé-Cusiac, R.*, Tremblay, P. F., Ansari, D., Grahn, J. Investigating the relationships between absolute and relative magnitude processing in space and time: An SEM study. *Mathematical Cognition and Learning Society*. June 1-3, 2022. Thomas More, Antwerp, Belgium.

Lee S.H.*, **Lagacé-Cusiac R.**, Grahn J. The effect of contextual interference and feedback on learning composers' musical styles. *2021 Canadian Society for Brain, Behaviour and Cognitive Science Meeting*. June 17, 2021. [Online].

Nadon, E.*, **Lagacé-Cusiac, R.**, Pilon, J., Gosselin, N. The effect of the emotional characteristics of different sound environments on selective attention of adults. *CRBLM Scientific Day*. May 14, 2018. Université de Québec à Montréal, Montréal, Canada.

Oswald, V., **Lagacé-Cusiac, R.***, Létourneau, A.*, Trahan, H.*, Toupin, G., Younes, Z., Rabaey, P., Jerbi, K. À l'état de repos, la puissance spectrale des oscillations cérébrales prédit la performance de la vitesse de traitement. [The spectral power of neural oscillations during resting-state predicts speed of processing performance]. *12e Journée scientifique du Département de Psychologie*. April 6, 2018. Université de Montréal, Montréal, Canada.

Research experience

Research assistant

06/2020-present

Co-supervised by Jessica Grahn, Christine Carter, and Jonathan De Souza
Western University

Research assistant (course based) Co-supervised by Fanny Barlaam and Sébastien Jacquemont CHU Sainte-Justine	01/2019-04/2019
Research assistant (course based) Co-supervised by Victor Oswald and Karim Jerbi CHU Sainte-Justine	01/2018-04/2018
Volunteer research assistant Supervised by Nathalie Gosselin BRAMS	04/2017-07/2017

Teaching experience

Teaching assistantship

Western University	
Neuroimaging of cognition (Graduate)	Fall 2020, 2021, 2022
Neuroimaging of cognition (Undergraduate)	Winter 2022
Data Science in Psychology (Undergraduate)	Winter 2021
Research Methods and Statistical Analysis in Psychology (Undergraduate)	2019-2020

Université de Montréal	
Language and cognition	Fall 2018

Honor thesis co-supervision (Western University)

Joshua Williams	2023-2024
<i>Investigating the whole number bias in musicians with formal music theory training</i>	

Ivan Quan	2022-2023
<i>Assessment of a modified temporal bisection task with responses on a continuous visual scale</i>	

Alistair Cranmer (Co-supervised)	2022-2023
<i>Effect of tDCS of the SMA on Groove Perception for High and Low Groove Music</i>	

Crystal Lee	2021-2022
<i>Investigating the relationship between temporal ratio perception and beat perception</i>	

Jaehyun (Jay) Hwang	2021-2022
<i>The effect of rhythmic context on temporal ratio perception</i>	

Seung Hyeck (Alex) Lee	2020-2021
<i>The Effect of Feedback and Contextual Interference on Learning Composers' Musical Styles</i>	

Online resources

Neuroimaging Web-Based Instruction (NEWBI) for fMRI (http://www.newbi4fmri.com/)	
Contributed to design and implementation of widgets	2020-2022

Guest lectures

Cognitive Neuroscience of Music, Western University	25/02/2020
	03/10/2023
<i>Talk: Dissociation between Musical and Monetary Reward Responses in Specific Music Anhedonia</i>	

Introduction to Sensation and Perception, Western University	02/12/2019
<i>Debate: Expert judge on the effects of music training on cognitive abilities</i>	

Other

Youth Climbing Team Coach	2023-present
Trampoline and gymnastics coach, Viagym	2012-2019
Head Coach (recreational level)	2017-2019
Tutor, Kumon Ste-Thérèse	2010-2017
Math (Pre-K to calculus)	
English as a first and second language	
Tutor, Collège Lionel-Groulx	
Music theory and ear training	2015-2016
Pre-Calculus & Calculus	2014-2015

Service & Other Employment

Committees

University of Western Ontario	
Co-founder and organizer, Coding Social Series	2021-2022
Member, Research methods and statistics taskforce	2020-2021
Member, Psychology Colloquium Series	2019-2020
Polytechnique de Montréal	
Consultant, Polycortex	2018-2019

Reviewer

Journal of Interpersonal Relations, Intergroup relations and Identity (JIRIRI)	2018-2023
Applied and Clinical Neuropsychology (NCACN)	2018-2023
Developmental Science (1x)	
Journal of Personality and Social Psychology (1x)	
Psychomusicology: Music, Mind, and Brain (1x)	

Public engagement/Volunteering

Science Rendez-vous, London, Ontario	
Booth organizer	2023
Booth volunteer	2022
COUHR London's Research Symposium (Judge)	10/2022
COUHR Montreal's Research Symposium (Judge)	08/2021

Trampoline and tumbling regional judge	2018-2019
Armand-Corbeil High School Concert Band (volunteer, musician)	2011-2019
Saxophone (2011-2013, high school student)	
Percussion (2013-2018, post-graduate volunteer)	
Trombone (2018-2019, post-graduate volunteer)	
Harmonie Laval (Saxophonist, Community Orchestra)	2016-2017

Training & Other Skills

Statistical training and workshops

Western-Fields summer school in computational neuroscience, Western University	09/2022
Brainhack, Western University	12/2021
Mixture modeling workshop, CenterStat	01/2022
Structural equation modeling workshop, CenterStat	05/2020

Teaching training

Climbing Wall Instructor Course	01/2023
Teaching Assistant Training Program, Western University	09/2019
National Coaching Certification Program (NCCP) level 2 training in trampoline	2018
NCCP level 1 training in trampoline (certified in 2017)	2012

Programming Experience

Languages: R/RStudio, Python, Matlab, Javascript, HTML
 Other research platforms: PsychoPy/Pavlovia, Qualtrics

Languages

English (Native/Bilingual)
 French (Native/Bilingual)

Musical experience

Instruments (in decreasing order of proficiency): Saxophone (most proficient), flute, mallet percussion, electric bass, acoustic and electric guitar, trombone (least proficient)

Sports

Bouldering and lead climbing (competing at regional level)	2022-present
Trampoline (competed at provincial and national levels)	2004-2014