

Manda Fischer, Ph.D.

Curriculum Vitae

Department of Psychology
Western University
London, ON, Canada

mfisch5@uwo.ca

TRAINING

2023 - Postdoctoral BrainsCAN Fellow, Western University
Advisor: Dr. Ingrid Johnsrude

Education

2023 Ph.D. in Psychology (Cognitive Neuroscience), University of Toronto
Advisors: Dr. Morris Moscovitch and Dr. Claude Alain

2019 M.A. in Psychology (Cognitive Neuroscience), University of Toronto
Advisors: Dr. Morris Moscovitch and Dr. Claude Alain

2018 B.Sc. in Honours Psychology with First Class Honours [3.96 GPA], McGill University
Advisor: Dr. Stephen McAdams

Visiting Researcher (Fully Funded)

2022 fMRI and DTI analysis to assess cross-modal reorganization of the visually deprived cortex
Oxford University | Advisor: Dr. Kate Watkins

2018 Machine learning (MVPA) of fMRI data to decode activity patterns during music learning
Montreal Neurological Institute | Advisor: Dr. Robert Zatorre

SELECTED SCHOLARSHIPS, HONOURS & AWARDS

Funding (Total Amount Awarded: \$354,046.72)

2023	Western Postdoctoral Fellowship (\$150,846.72 over 2 years)	Institutional
2022	Women in Cognitive Science Small Research Grant for Jr Scientists (\$1,500)	National
2020	NSERC Canada Graduate Scholarship, Doctoral, rank No.1 in Psychology (\$105,000 over 3 years)	National
2020 (declined)	NSERC Complex Dynamics Training Grant (\$26,000)	National
2020	NSERC Michael Smith Foreign Study Supplement (\$6,000)	National
2020	Mitacs Globalink Research Award (\$6,000)	National
2019	NSERC Complex Dynamics Training Grant (\$26,000)	National
2019 (declined)	NSERC Canada Graduate Scholarship, Masters (\$17,500)	National
2018	FRQNT Undergraduate Student Research Award (\$2,000)	Provincial
2018	NSERC Undergraduate Student Research Award (\$5,600)	National
2017	FRQNT Undergraduate Student Research Award (\$2,000)	Provincial
2017	NSERC Undergraduate Student Research Award (\$5,600)	National

Honours & Awards

2024	Travel Award, Association for Research in Otolaryngology (\$1,043)	International
2024	Top 3 Best Postdoc Talk, Association for Research in Otolaryngology	International
2023	Jack and Rita Catherall Fund, Rotman Research Institute at Baycrest (\$500)	Institutional
2022	Jack and Rita Catherall Fund, Rotman Research Institute at Baycrest (\$500)	Institutional
2021	Top Cited Article, WIREs Cognitive Science	International
2020	Top Cited Article, WIREs Cognitive Science	International
2019	Finkler Graduate Fellowship, Rotman Research Institute at Baycrest (\$3,000)	Institutional
2019	Ebbinghaus Award - Best Talk, Toronto Area Memory Group Meeting (\$75)	Regional
2018	Faculty Arts & Science Admissions Award, University of Toronto (\$5,000)	Institutional
2017	Celia Hendler Scholarship in Psychology, McGill University (\$3,545)	Institutional

PUBLICATIONS

Peer Reviewed Publications

***Fischer, M.** & *McAdams, S. (in press). Instrument timbre combinations influence the relative prominence of perceptual layers in orchestral music. *Music Perception*.

* *Equal contributions*

Fischer, M., Moscovitch, M., Keisuke, F., & Alain, C. (2023). Ready for Action: When the brain learns, yet memory-biased action does not follow. *Neuropsychologia*, 108660.

Fischer, M., Soden, K., Thoret, E., Montrey, M., & McAdams, S. (2021). Instrument timbre enhances perceptual segregation in orchestral music. *Music Perception*, 38(5), 473–498.

Fischer, M., Moscovitch, M., & Alain, C. (2021). A systematic review and meta-analysis of memory-guided attention: Frontal and parietal activation suggests involvement of fronto-parietal networks. *WIREs Cognitive Science*, 12(1), e1546.

Fischer, M., Moscovitch, M., & Alain, C. (2020). Incidental auditory learning and memory-guided attention: Examining the role of attention at the behavioural and neural level using EEG. *Neuropsychologia*, 147, 107586.

Manuscripts Under Review and in Preparation

Fischer, M., Moscovitch, M., & Alain, C. (*invited resubmission*). Memory-guided perception is shaped by dynamic two-stage theta- and alpha-mediated retrieval. *Annals of the New York Academy of Sciences*. *PsyArXiv*. <https://doi.org/10.31234/osf.io/nxh4s>

Fischer, M. & Johnsrude, I. (2024). The Morgan Freeman effect: Long-term memory for voices frees up cognitive capacity to enhance speech perception in noise. *PsyArXiv*. <https://doi.org/10.31234/osf.io/4wuby>

Fischer, M., Moscovitch, M., & Alain, C. (in prep). Incidental learning enhances auditory sensitivity in real-world soundscapes.

Mo, S., **Fischer, M.**, Moscovitch, M., & Alain, C. (in prep). Individual differences in memory-guided attention.

PRESENTATIONS

Invited Oral Presentations

Fischer, M. (2024). How does memory prepare us to act? Using EEG to track dynamic retrieval processing. Köhler Memory Lab. London, ON, Canada.

Fischer, M. (2023). Ready for Action: When the brain learns, yet memory-biased action does not follow. Brain & Mind Coffee Talk, University of Western Ontario. London, ON, Canada.

Fischer, M. (2023). Ready for Action: When the brain learns, yet memory-biased action does not follow. Stanford Memory Lab. Stanford, CA, USA (presented online).

Fischer, M. (2022). Optimizing attention and performance: The role of experience and memory. Nobre Brain and Cognition Lab. Oxford, UK.

Fischer, M. (2022). Memory-guided attention in hearing. Watkins Speech and Brain Lab. Oxford, UK.

Fischer, M., Moscovitch, M., & Alain, C. (2021). Mapping ‘expectation for perception’: Directed attention at encoding facilitates response preparation to high probability events. Society for Psychophysiological Research – The Faces of the Future Flash Talks (presented online due to COVID-19).

Fischer, M., Soden, K., Thoret, E., Montrey, M., & McAdams, S. (2019). The role of timbre in perceptual segregation in orchestral music. Society of Music Perception and Cognition. New York, NY, USA.

Fischer, M. (2017). The role of timbre in auditory stream segregation. Harnad Cognition & Communication Lab. Montreal, QC, Canada.

Oral Presentations

Fischer, M. & Johnsrude, I. (2024). The Morgan Freeman effect: Advantages and disadvantages of listening to speech under distraction. Auditory Perception, Cognition, & Action Meeting (APCAM), New York, NY, USA.

Fischer, M., Moscovitch, M., & Alain, C. (2024). Incidental learning enhances auditory sensitivity in real-world soundscapes. Association for Research in Otolaryngology MidWinter Meeting, Anaheim, CA, USA. *Awarded top 3 best postdoc talk.

Fischer, M., Moscovitch, M., & Alain, C. (2022). Acoustic change detection during associative auditory learning and explicit memory is related to enhanced signal detection at retrieval. APCAM Meeting, Boston, MA, USA.

Fischer, M., Moscovitch, M., & Alain, C. (2022). What you heard is where you listen: Alpha and theta differences localized to parietal and temporal lobes support memory retrieval for cued sound location. Ebbinghaus Empire Data Blitz, The University of Toronto (presented online due to COVID-19).

Fischer, M., Moscovitch, M., & Alain, C. (2021). Mapping ‘expectation for perception’: Directed attention at encoding facilitates response preparation to high probability events. Canadian Society for Brain, Behaviour and Cognitive Science Annual Meeting (presented online due to COVID-19).

Fischer, M., Moscovitch, M., & Alain, C. (2021). Optimizing attention and performance: The role of experience and memory. Ebbinghaus Empire Data Blitz, The University of Toronto (presented online due to COVID-19).

Fischer, M., Moscovitch, M., & Alain, C. (2020). Directed attention at exposure modulates implicit memory for real-world soundscapes at retrieval. APCAM Meeting (presented online due to COVID-19).

Fischer, M. (2019). Memory-guided attention in hearing. Rotman Research Trainee SpeakEasy. The Rotman Research Institute at Baycrest Hospital, Toronto, ON, Canada.

Fischer, M., Moscovitch, M., & Alain, C. (2019). Incidental auditory learning and memory-guided attention: A behavioural and electroencephalogram (EEG) study. APCAM Meeting, Montreal, QC, Canada.

Fischer, M., Moscovitch, M., & Alain, C. (2019). Does everyday auditory experience facilitate memory-guided attention? Toronto Area Memory Group Meeting, Toronto, ON, Canada.

Fischer, M., Moscovitch, M., & Alain, C. (2019). Incidental auditory learning and memory-guided attention: A behavioural and EEG study. Toronto Auditory Research Group Meeting, Toronto, ON, Canada. *Awarded the best graduate student talk.

Select Poster Presentations

Fischer, M. & Johnsrude, I. (2024). The Morgan Freeman effect: Advantages and disadvantages of listening to speech under distraction. Psychonomic Society Annual Meeting. New York, NY, USA.

Fischer, M., Moscovitch, M., & Alain, C. (2024). Incidental learning enhances auditory signal detection. Cognitive Neuroscience Society Annual Meeting, Toronto, ON, Canada.

Fischer, M., Moscovitch, M., & Alain, C. (2024). Incidental learning enhances auditory sensitivity in real-world soundscapes. Association for Research in Otolaryngology MidWinter Meeting, Anaheim, CA, USA.

Fischer, M., Moscovitch, M., & Alain, C. (2023). Long-term memory triggers covert response preparation at retrieval. Cognitive Neuroscience Society Annual Meeting, San Francisco, CA, USA.

Fischer, M., Moscovitch, M., & Alain, C. (2022). Long-term memory triggers covert response preparation at retrieval. Psychonomic Society Meeting, Boston, MA, USA.

Fischer, M., Moscovitch, M., & Alain, C. (2022). Memory-guided auditory benefits relate to theta differences localized to anterior temporal lobe. Society for Neuroscience, San Diego, CA, USA.

Mo, S., **Fischer, M.,** Moscovitch, M., & Alain, C. (2022). Individual differences in memory-guided attention. Society for Psychophysiological Research, Vancouver, BC, Canada (presented online).

Fischer, M., Moscovitch, M., & Alain, C. (2022). Implicit memory and parietal source-localized alpha-band power facilitate memory-guided attention in real-world sound-clips. *New Perspectives on Declarative Memory Conference*, Norwich, UK.

Fischer, M., Moscovitch, M., & Alain, C. (2022). Implicit memory for target location and parietal source-localized alpha-band power facilitate memory-guided attention in real-world sound-clips. *Cognitive Neuroscience Society Annual Meeting*, San Francisco, CA, USA.

Fischer, M., Moscovitch, M., & Alain, C. (2021). Implicit memory for target location facilitates memory-guided attention in real-world sound-clips. *Society for Neuroscience Meeting* (presented online due to COVID-19).

Fischer, M., Moscovitch, M., & Alain, C. (2021). Memory-guided attention: Lateralized event-related potentials (ERPs) index location of lateralized targets embedded in learned soundscapes. *Psychonomic Society Meeting* (presented online due to COVID-19).

Fischer, M., Moscovitch, M., & Alain, C. (2021). Mapping ‘expectation for perception’: Directed attention at encoding facilitates response preparation to high probability events. *Society for Psychophysiological Research Annual Meeting* (presented online due to COVID-19).

Fischer, M., Moscovitch, M., & Alain, C. (2021). Directed attention at encoding facilitates response preparation to high probability events. *Nonlinear Dynamics of Brain and Behaviour Symposium* (presented online due to COVID-19).

Fischer, M., Moscovitch, M., & Alain, C. (2020). Long-term memory-guided attention and theta-band oscillations. *Nonlinear Dynamics of Brain and Behaviour Symposium* (presented online due to COVID-19).

TEACHING EXPERIENCE

Teaching Positions

University of Toronto

Quantitative Methods (Proficient in R, Jamovi, JASP, and G*Power)

Tutorial Instructor/	Advanced Statistics (PSY202)	2021
Teaching Assistant	<i>Conducted weekly tutorials for 30 students on statistical theory, including hands-on training in Jamovi and G*Power.</i>	
Teaching Assistant	Psychological Research (PSY203)	2019
Teaching Assistant	Introduction to Statistics (PSY201) – 6 sessions	2018 - 2022

Other Topics

Teaching Assistant	Introduction to Psychology (PSY100)	2023
Teaching Assistant	The Psychology of Prejudice (PSY12)	2021
Teaching Assistant	Introduction to Psychology (PSY100)	2020
Teaching Assistant	Introduction to Social Psychology (PSY220)	2020
Teaching Assistant	Personality and Its Transformations (PSY230)	2020
Guest Lecturer	Cognitive Neuroscience (PSY493)	2019

Lectures & Workshops

Fischer, M. (May 2024). “Introduction to EEG” for *Discovery Day* at the Brain & Mind Institute, London, ON, Canada.

Fischer, M. (May 2022). “Your Amazing Brain” for *Science Day* at the Banbury Museum in partnership with Oxford University, Oxford, UK.

Fischer, M. (April 2021). “Memory-Guided Attention: A Look at The Neural Correlates That Underly Expectation for Perception” for *Neuroscience Research Group Talk Series* at York University. Toronto, ON, Canada.

Fischer, M. (November 2020). “Introduction to EEG” for *Open House* at the Rotman Research Institute at Baycrest Hospital, Toronto, ON, Canada.

Fischer, M. (May 2019). “Statistical Variability” for *Introduction to Statistics (PSY201)* at the University of Toronto, Toronto, ON, Canada.

Fischer, M. (May 2019). “Introduction to Hypothesis Testing” for *Introduction to Statistics (PSY201)* at the University of Toronto, Toronto, ON, Canada.

Fischer, M. (April 2019). “The Psychology of Music: Our brain is a super decoder for incoming sound” for *Cognitive Neuroscience (PSY493)* at the University of Toronto, Toronto, ON, Canada.

Fischer, M. (February 2019). “Does Everyday Auditory Experience Facilitate Memory-Driven Attention?” for *Graduate Speaker Series* at the University of Toronto, Toronto, ON, Canada.

Professional Development

In progress	Certificate in University Teaching and Learning , Western University
2024	How to Be a Good Mentor and Mentee , Western University
2023	Navigating Hidden Diversity: Mental health, Disability & Gender/Sexual Identity , Toronto Area Memory Group Meeting Workshop
2021	Teaching Workshop and Certificate , University of Toronto
2019	Writing Instruction for TAs (WIT) Training , University of Toronto

SUPERVISION

Brain & Mind Institute at Western University

2024 -	Maxine Monpetit, MA/PhD student
2024 -	Grace Malheiro, Undergraduate thesis student
2024 -	Vibha Sarathy, Undergraduate thesis student
2023 - 2024	Harsh Patel, Undergraduate volunteer

Rotman Research Institute at Baycrest Hospital

2022	William Ji, Highschool student
2021 - 2022	Shimin Mo, Undergraduate thesis student
2021 - 2022	Juan Martin Soto, Undergraduate co-op student

2019 - 2020 Shahier Paracha, Undergraduate volunteer
 2019 Karishma Ramdeo, Undergraduate volunteer
 2019 Parnian Tajbakhsh, Undergraduate volunteer

SERVICE & OUTREACH

2024 - 2026 **Postdoc Representative**, University Research Board of the Senate, Western University
 2024 **Science Volunteer**, Science Rendezvous to excite kids about STEM
 2024 **EEG Demonstrator & Mentor**, Discovery Day for high school students
 2024 **Judge**, Inspiring Diversity in STEM 2024 Conference
 2024 **Postdoc Representative & Mentor**, Inspiring Diversity in STEM 2024 Conference
 2023 **Submission Reviewer**, Rotman Research Institute Conference
 2022 - **Ad-hoc Reviewer**, *Psychological Science*, *Nature Communications*, *Cerebral Cortex*,
 Human Brain Mapping
 2022 - 2023 **Mentor & Reviewer**, University of Toronto Equity Diversity & Inclusion Committee
 2022 **Science Volunteer & Guide**, Science Day for blind children at the Banbury Museum
 2020 **EEG Demonstrator**, Baycrest Hospital Open House
 2019 - 2023 **Panelist & Mentor**, University of Toronto Cognitive Neuroscience Recruitment
 2018 **Conference Organizing Committee Member**, International Timbre Conference 2018

VOLUNTEER & COMMUNITY WORK

2024 **Founding Member**, Food Support Program at Western University
 2022 **Certified Nutrition & Kitchen Volunteer**, Kensington Hospice
 2020 - 2021 **Visitor & Trained Mealtime Assistant**, Baycrest Hospital – Dementia unit
 2019 **Fiddler & Concert Organizer**, Baycrest Hospital
 2016 - 2017 **Program Coordinator**, Miriam Hospital for adults with varying intellectual abilities
 2016 **Tutor**, DESTA school for marginalized youth
 2015 - 2018 **Performer**, Change for Children; She's the First; Medical Relief for Children
 2015 **Initiator and Organizer**, The Diversity Project art installation, Vanier College
 2015 **Organizer and Panelist**, Women and Racism in STEM, Vanier College
 2013 - 2015 **Mathematics Tutor**, Drop-in All Programs – Vanier College

CITIZENSHIP

Canadian

LANGUAGES

English (Native)

French (Professional Working Proficiency)