LAUREN K. FINK

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EDUCATIONAL BACKGROUND

Ph.D. & M.Sc. in **Neuroscience**, Center for Mind & Brain, Neuroscience Graduate Program, University of California, Davis, CA, USA, 2014 - 2019

M.Phil. in **Music Studies**, Centre for Music & Science, Faculty of Music, University of Cambridge, England, UK, 2013 - 2014

B.M. in **Percussion Performance** (major) and **Psychology** (minor), Percussion Dept., Performance Studies Division, University of Cincinnati College Conservatory of Music, & Dept. of Psychology, College of Arts & Science, Cincinnati, Ohio, USA, *summa cum laude,* 2009 - 2013

CURRENT STATUS AT MCMASTER

Assistant Professor	Department of Psychology, Neuroscience & Behavior (Faculty of Science)
Affiliated member	McMaster Institute for Music & the Mind (Faculty of Science)
	School of Computational Science & Engineering (Faculty of Science)
	Neuroscience (Faculty of Health Sciences)
	Centre for Advanced Research in Experimental and Applied Linguistics (Faculty of Humanities)
Status	Tenure-track, pre-tenure
Appointed	Jan 1, 2023

EMPLOYMENT HISTORY

A) ACADEMIC (FULL-TIME)

Assistant Professor, Department of Psychology, Neuroscience & Behavior, McMaster University, Ontario, Canada, Jan. 1, 2023–.

Wissenschaftliche Mitarbeiterin (**Postdoctoral Scientific Associate**), Department of Music, Max Planck Institute for Empirical Aesthetics, Frankfurt am Main, Germany, Jan. 1, 2020 – Dec. 31, 2022.

Affiliated Scientist, Max Planck-NYU Center for Language, Music & Emotion, New York University, New York, NY, USA, 2021 –

Graduate Researcher, Janata Lab, Center for Mind & Brain, University of California, Davis, CA, USA, 2015-2019

Graduate Researcher, Centre for Music & Science, University of Cambridge, UK, 10/2013 – 08/2014

B) OTHER

Visiting Researcher in the Max Planck Institute for Empirical Aesthetics, Frankfurt, Germany, 08/2017

Visiting Researcher in the Swartz Center for Computational Neuroscience at the University of California, San Diego, 08/2016

Visiting Researcher in the Center for Computer Research in Music and Acoustics, Stanford University, 07/2016 – 08/2016

Visiting Researcher in the Geng Attention Lab, Center for Mind & Brain, University of California, Davis, 03/2015 – 06/2015

Visiting Researcher in the Dynamic Memory Lab, Center for Neuroscience, University of California, 01/2015 – 03/2015

Visiting Researcher in the Janata Lab, Center for Mind & Brain, University of California, Davis, 09/2014 – 12/2014

Intern, Archives & Rare Books Library, University of Cincinnati, Cincinnati, OH, USA, 2011-2013

PROFESSIONAL ORGANIZATIONS

Cognitive Neuroscience Society, 2018 –

Women in Music Information Retrieval, 2017 –

Society for Music Perception & Cognition, 2016 –

Association of Women in Science, 2015-19

Percussive Arts Society, 2007-16

Society for Philosophy & Psychology, 2013-14

AREAS OF INTEREST

RESEARCH

- Neural mechanisms of attention
- Computational modeling of attention and expectations
- The role of rhythm in shaping attention and action
- Time series analysis, including data mining techniques
- Social neuroscience
- Group dynamics
- Adaptive systems to enhance group cooperation
- Eye-tracking methods (incl. webcam eye-tracking, multi-person mobile eye-tracking, and analysis and visualization techniques)
- Wearable biosensing (incl. programmable smartwatches)
- Scalable neurophysiological methods
- Audience research
- Online, web-based research
- Open-source code and open science practices

TEACHING

- Critical inquiry
- Scientific literacy
- Scientific writing
- Scientific computing and programming
- Web technologies
- Collaboration and teamwork
- Public communication and presentation skills
- Peer-review
- Data visualization and visual rhetoric
- Open and reproducible science

CONSULTING

- Research methods (particularly eye-tracking, and computer vision)
- Sound design and noise attenuation
- Research facility design
- STEAM public outreach
- Scientific support for arts-based initiatives

HONOURS

Summary: 18 honors, totaling ~ $180,700 CAD.

Achievement Research Award for College Scientists, Northern California Chapter, ARCS Foundation, CA, USA ($22,000 USD), 2017-19

Lead Graduate Writing Fellowship, Writing Across the Curriculum Program, University of California, Davis, CA, USA ($11,000 USD), 2016-19

Travel Award, University Writing Program, University of California, Davis, CA, USA ($1,900 USD), 2016-19

Special Projects Award, Graduate Student Association, University of California, Davis, CA, USA ($700 USD), 2018

Travel Award, Graduate Student Association, University of California, Davis, CA, USA ($1000 USD), 2017-18

Summit Scholarship, Lesbians Who Tech, San Francisco, CA, USA ($250 USD), 2018

Graduate Research Award, University of California, Davis & Humanities Program, CA, USA ($3,000 USD), 2016-17

Ling-Lie Chau Student Award for Brain Research, University of California, Davis, CA, USA ($1,000 USD), 2016

Travel Award, University of California Music Experience Research Community Initiative Symposium ($1,200 USD), 2015

Graduate Writing Fellowship, Writing Across the Curriculum Program, University of California, Davis, CA, USA ($3,000 USD), 2015-16

Neuroscience Graduate Group Fellowship, University of California, Davis, CA, USA ($28,680 USD), 2014-15

Travel Grant, William Barclay Squire Fund/Wolfson College, University of Cambridge, England, UK (£600 GBP), 2014

Wolfson Cambridge Scholarship, Cambridge Overseas Trust, University of Cambridge, England, UK (£7000 GBP), 2013-14

Marshall Scholarship Finalist, University of Cincinnati, OH, USA, 2012-13

Summer Undergraduate Research Fellowship, University of Cincinnati, OH, USA ($4,000 USD), 2012

Cincinnatus Scholarship, University of Cincinnati, OH, USA ($32,000 USD), 2009-13

College-Conservatory of Music Scholarship, University of Cincinnati, OH, USA ($4,000 USD), 2009-13

Founces M. Luley Music Scholarship, The estate of Miss Founces M. Luley ($8,000 USD), 2009-13

SCHOLARLY AND PROFESSIONAL ACTIVITIES

A) EDITORIAL BOARDS

Editorial Board Member, Journal of Eye Movement Research, 2021 –

Guest Editor, Special Issue: "The application of eye-tracking music research," Journal of Eye Movement Research, 2017-19

Graduate Editor-in-Chief, Explorations: The UC Davis Undergraduate Research Journal, 2016-17

Graduate Editor, Explorations: The UC Davis Undergraduate Research Journal, 2015-16

B) GRANT AND PERSONNEL COMMITTEES

Hiring Committee, McMaster Institute for Music & the Mind / LIVELab, Facility Manager Search, McMaster University, Ontario, Canada, 2025

Graduate Admissions Reviewer, Neuroscience Graduate Program, McMaster University, Ontario, Canada, 2025

Admissions Committee & Graduate Student Coordinator, Neuroscience Initiative to Enhance Diversity, University of California, Davis, CA, USA, 2017

Organizing Committee, Neuroscience Graduate Program Annual Retreat, University of California, Davis, CA, USA, 2014-16

C) EXECUTIVE POSITIONS

Board of Directors, **Hamilton Philharmonic Orchestra**, Ontario, Canada, 2024-31

Organizing Committee, **Toronto Aesthetics Science & Creativity Conference**, 2026

University Planning Committee Representative, **Budget Committee**, McMaster University, Ontario, Canada, 2025-26

Faculty of Science Representative, **University Planning Committee**, McMaster University, Ontario, Canada, 2023-26

Scientific Advisory Committee, **Latin American Conference on Eye Movements**, Viña del Mar, Chile, 2025

Advisory Committee Member, **School of Computational Science & Engineering**, McMaster University, Ontario, Canada, 2024 –

Scientific Co-Chair, **Annual NeuroMusic Conference**, McMaster University, Ontario, Canada, 2024 –

Departmental Representative, **Research & High-Performance Computing Support**, McMaster University, Ontario, Canada, 2023 –

Member, **Music Cognition Steering Committee**, McMaster University, Ontario, Canada, 2023 –

Postdoctoral Representative, **Direktorium (Board of Directors)**, Max Planck Institute for Empirical Aesthetics, Frankfurt a.M., Germany, 2020-22

Member, **Equality Support Team**, Max Planck Institute for Empirical Aesthetics, Frankfurt a.M., Germany, 2020-22

Scientific Co-Chair, **Conference on Music & Eye-Tracking**, Max Planck Institute for Empirical Aesthetics, Frankfurt a.M., Germany, 2017 & 2022

Scientific Co-Chair. **SOMA Summit**, University of California, Davis. 2017-19

Co-Founder & Coordinator. **Seminar Outreach for Minority Advocacy (SOMA)**, University of California, Davis. 2017-19

D) JOURNAL REFEREE

Proceedings of the National Academy of Sciences | *European Journal of Neuroscience* | *Brain and Cognition* | *Psychology of Music* | *Behavior Research Methods* | *Scientific Reports* | *Cortex* | *Cognitive Neurodynamics* | *PLoS ONE* | *Music & Science* | *Journal of Vision* | *Vision Research* | *Journal of Eye Movement Research* | *Frontiers in Psychology* | *Developmental Science* | *Quarterly Journal of Experimental Psychology* | *Journal of Expertise* | *Psychology of Music* | *Journal of Experimental Psychology: Learning, Memory, and Cognition*

E) EXTERNAL GRANT REVIEWS

Grant Review Panelist, **European Science Foundation**, Belgium, European Union, 2024 –

Grant Review Panelist, **National Science Foundation**: Perception Action & Cognition Program, VA, USA, 2023

Grant Review Panelist, **California Arts Council**: Research in the Arts Grant, CA, USA, 2019

F) EXTERNAL CONFERENCE REVIEWS

Latin American Conference on Eye Movements | *Society for Music Perception & Cognition* | *International Conference on Music Perception & Cognition* | *Rhythm Perception & Production Workshop* | *International Conference of Students of Systematic Musicology* | *Conference on Music & Eye-Tracking* | *Neuromusic Conference*

COURSES TAUGHT (LAST 5 YEARS ONLY)

A) UNDERGRADUATE

SCIENCE 2SE1, **Scientific Research Skills Workshop: Collecting and Using Multi-Person Mobile Eye Tracking Data**, McMaster University, Ontario, Canada, Spring 2025

PNB 2XF3, **Perspectives in Psychology, Neuroscience & Behaviour**, McMaster University, Ontario, Canada, Winter 2025

PNB 3EE3, **Perception Laboratory**, McMaster University, Ontario, Canada, (1) Fall 2023, (2) Winter 2024, (3) Winter 2025

PNB 4D09, **Senior Honours Thesis**, McMaster University, Ontario, Canada, (1) Fall 2023, (2) Winter 2024, (3) Fall 2024, (4) Winter 2025

HTHSCI 4A15, **Senior Thesis**, McMaster University, Ontario, Canada, (1) Fall 2023, (2) Winter 2024, (3) Fall 2024, (4) Winter 2025

NEUROSCI 4L12, **Senior Thesis**, McMaster University, Ontario, Canada, (1) Fall 2023, (2) Winter 2024, (3) Fall 2024, (4) Winter 2025

PNB 3QQ3, **Intermediate Independent Research**, McMaster University, Ontario, Canada, (1) Fall 2023, (2) Winter 2024

PNB 2QQ3, **Introductory Independent Research**, McMaster University, Ontario, Canada, Winter 2023

B) GRADUATE

PSYCH 714, **Special Topics in PNB**, McMaster University, Ontario, Canada, Spring 2025

Musical Time: Psychological & Theoretical Perspectives, Goethe University, Frankfurt am Main, Germany, Spring, 2021

C) GUEST LECTURES

"From CCM to Neuroscience and back again!" Neuroscience of Music, Graduate Course, **U. of Cincinnati College-Conservatory of Music / U. of Cincinnati Medical School**, Cincinnati, Ohio, USA, Winter, 2025

"Audio-OCULO-motor Interactions." Psychology of Music, **Tufts University**, Boston, MA, USA Winter, 2025

"The cognitive neuroscience of music." Psychology of Language, **Wellesley College**, Wellesley, MA, USA, Winter, 2024

"Pupillometry and eye-tracking as tools to study auditory attention." Neuroscience Seminar (NEUROSCIENCE 4S03), **McMaster University**, Ontario, Canada, Winter, 2024

"Experimentation in the Cognitive Neuroscience of Music." Neuroscience of Music, Graduate Course, **U. of Cincinnati College-Conservatory of Music / U. of Cincinnati Medical School**, Cincinnati, Ohio, USA, Winter, 2023

"Pupillometry and eye-tracking as tools to study auditory attention." Neuroscience Seminar (NEUROSCIENCE 4S03), **McMaster University**, Ontario, Canada, Fall, 2023

"Pupillometry and eye-tracking as tools to study auditory attention." Integrative PNB Through Scientific Writing (PNB 2XD3), **McMaster University**, Ontario, Canada, Winter 2023

"Data science for neuroscience." Summer internship program, **Center for Language, Music & Emotion, New York University**, USA, Summer, 2021

CONTRIBUTIONS TO TEACHING PRACTICE

A) PEDAGOGIC INNOVATION AND/OR DEVELOPMENT OF TECHNOLOGY-ENHANCED LEARNING

SCIENCE 2SE1: Created completely new course incorporating hands-on learning and coding, using CFI-funded mobile eye-trackers in the LIVELab. All 30 students had their own eye-tracking glasses to work with. The course focussed on developing core competencies like understanding how an eye-tracker works, what it measures, what we can learn about human attention, social engagement, etc., privacy concerns, how to collect data, issues during data collection, and how to analyze data in python using code notebooks running in every students' browser. The course involved active learning: students wore the eye-tracking glasses during a walk around campus and through McMaster's Museum of Art, they got to practice (d)equipping devices, collecting data, etc. For many students, this

was their first time touching research equipment and stepping foot in the LIVELab. A majority left excited about research and future opportunities to pursue their own research goals.

PNB3EE3: Expanded existing course to involve web technologies and web-based experiments. All students learn the foundations of the web (html, css, javascript) and how to program basic psychological experiments for both online and in-person participants. Additionally, I incorporated open science approaches, including experiment pre-registration and reproducible analysis code. For at least a few sessions in the course, students have the opportunity for hands-on experience with CFI-funded research hardware, including mobile eye-trackers, programmable smart watches, embedded systems (e.g., Arduino, Bela), etc.

B) COURSE/CURRICULUM DEVELOPMENT

PNB2XF3 (Perspectives in Psychology, Neuroscience & Behaviour): After inheriting this course, I have updated presentation materials and assignments, changed the format to allow student-driven topic selection, and incorporated additional (15 minute) guest lectures from graduate students, at the request of the undergraduates, who find such lectures hugely informative for understanding potential paths after their Bachelor's degree.

C) DEVELOPMENT/EVALUATION OF EDUCATIONAL MATERIALS AND PROGRAMS

Certificate, Professor Hippo-on-Campus Mental Health Education Program, McMaster Okanagan Office of Health & Well-being, McMaster University, 2024-25 (Faculty Workshop & Core Program)

Certificate, American Association for the Advancement of Science (AAAS), Science Communication Program, 2017

Certificate, Designing an Undergraduate STEM course, AAAS, 2017

Certificate, Thoughtful Pedagogy for Diverse Learning Environments, University of California, Davis, Center for Educational Effectiveness, 2017

Certificate, Foundations in Teaching, University of California, Davis, Center for Educational Effectiveness, 2016

SUPERVISORSHIPS

	CURRENTLY		PAST 10 YEARS		Cum. Total
	Supervised	Co-Supervised	Supervised	Co-Supervised	
Undergrad	4	1	18	4	**27**
Intern	-	-	3	1	**4**
Masters	-	-	2	-	**2**
PhD	3	-	-	1	**4**
Postdoc	-	1	-	-	**1**

A) POSTDOCTORAL

Jesse Pazdera (co-supervised with Gabriel Xiao, Louis Schmidt, Mel Rutherford & Laurel Trainor; 09/2024—present). *A user-friendly research app for facial expression detection via iPad.*

B) DOCTORAL

Alexander Nguyen (starting 09/2025). *TBD.*

Shreshth Saxena (03/2021–present). *Mobile and scalable eye-tracking methods in audiovisual, social, and remote contexts.* Dept. of Psychology, Neuroscience & Behaviour, McMaster University, Ontario, Canada.

Maya Flannery (03/2023–present). *Uniting formal theories and computational models of individual musical preferences.* Dept. of Psychology, Neuroscience & Behaviour, McMaster University, Ontario, Canada.

Anna Czepiel (co-supervised with Sonja Kotz; 01/2020–09/2023). *Real-world music listening in concerts: aesthetic experiences and peripheral physiological responses.* Music Dept., Max Planck Institute for Empirical Aesthetics, Frankfurt am Main, Germany & Dept. of Neuropsychology and Psychopharmacology, Maastricht University, Netherlands.

C) MASTER

Joshua Schlichting (09/2023–07/2025), *How music advocacy influences audiences' prosociality.* Dept. of Psychology, Neuroscience & Behaviour, McMaster University, Ontario, Canada.

Alexander Nguyen (visiting masters student: 03/2024 – 04/2024), Dept. of Psychology, Neuroscience & Behaviour, McMaster University, Ontario, Canada, funded through the German Academic Exchange Service (DAAD). Home institution: Hochschule für Musik Karlsruhe.

D) SUPERVISORY COMMITTEES

Sarah Ripley (PhD; 09/2024—present), Dept. of Psychology, Neuroscience & Behaviour, McMaster University, Ontario, Canada.

Konrad Swierczek (PhD; 03/2023—present), Dept. of Psychology, Neuroscience & Behaviour, McMaster University, Ontario, Canada.

Carie Guan (PhD; 09/2024—present), Dept. of Psychology, Neuroscience & Behaviour, McMaster University, Ontario, Canada.

Sahir Dhalla (PhD; 09/2024—present), Neuroscience Graduate Program, McMaster University, Ontario, Canada.

Matin Yousefabai (PhD; 09/2023—present), Computational Science & Engineering, McMaster University, Ontario, Canada.

Yaqian Bao (PhD; 09/2024—present), Centre for Advanced Research in Experimental and Applied Linguistics, McMaster University, Ontario, Canada.

Aditi Shukla (MSc; 09/2024—present), Dept. of Psychology, Neuroscience & Behaviour, McMaster University, Ontario, Canada.

Jackie Zhou (MSc; 09/2023—present), Dept. of Psychology, Neuroscience & Behaviour, McMaster University, Ontario, Canada.

PhD External Examiner, Connor Spiech. University of Oslo, Norway, 2021.

PhD Comprehensive Exam Committee Member, Cameron Anderson, Dept. of Psychology, Neuroscience & Behaviour, McMaster University, Ontario, Canada.

E) BACHELOR

Thesis Students

Jackson Shi (09/2024 – 04/2025). *Validating user-friendly webcam eye-tracking tools in jsPsych.* Dept. of Psychology, Neuroscience & Behaviour, McMaster University, Ontario, Canada.

Gloria Liu (09/2024 – 04/2025). *The role of self-relevant framing in users' engagement with scientific content on social media.* Dept. of Psychology, Neuroscience & Behaviour, McMaster University, Ontario, Canada.

Kyra Bonus (09/2024 – 04/2025). *A systematic review and meta-analysis of maladaptive music listening.* Dept. of Psychology, Neuroscience & Behaviour, McMaster University, Ontario, Canada.

Megan Klose (09/2024 – 04/2025). *The role of active vs. passive bilateral stimulation in successful Eye-Movement Desensitization and Reprocessing Therapy (EMDR).* Dept. of Psychology, Neuroscience & Behaviour, McMaster University, Ontario, Canada.

Ahmed Saeed (09/2024 – 04/2025). *Prosocial effects of motor synchrony on co-performers and affiliates.* Neuroscience Dept., McMaster University, Ontario, Canada.

Alador Bereketab (09/2024 – 04/2025). *A bilingual children's book at the intersection of neuroscience and music performance.* Health Sciences, McMaster University, Ontario, Canada.

Mariyah Shaikh (09/2023 – 04/2024). *What is the relationship between cardiac interoception, music, and anxiety?* Dept. of Psychology, Neuroscience & Behaviour, McMaster University, Ontario, Canada.

Connor Horsley (09/2023 – 04/2024). *Using eye-tracking tools to quantify the relationship between attentional fluctuations and synchronization performance dynamics in an adaptive tapping task.* Neuroscience Dept., McMaster University, Ontario, Canada.

Catherine Deng (09/2023 – 04/2024). *Music description and categorization: A semantic analysis of user-generated tags.* Health Sciences, McMaster University, Ontario, Canada.

Alexander Nguyen (01/2022 - 12/2022). *Towards a systematic comparison of computational models of musical expectations.* Music Dept., Max Planck Institute for Empirical Aesthetics, Frankfurt a.M., Germany

Capstone Projects & Students (Dept. of Computer Science, McMaster University)

Jay Mody, Caitlin Bridel, Michelle Domagala-Tang, Eshaan Chaudhari (09/2023 – 04/2024). *Accelerating deep-learning-based webcam eye-tracking in the browser.*

Zahid Mirza, Biranugan Pirabaharan, Mehak Khan, Areez Visram, Neil Lobo (09/2023 – 04/2024). *Synchronizing multi-person eye-tracking in dynamic real-world environments.*

Interns

Synthia Xing (06/2025 – 08/2025). *Sensory and physiological mechanisms of how low bass affects movement and pleasure.* Dept. of Psychology, Neuroscience & Behaviour, McMaster University, Ontario, Canada. Funded by Natural Sciences and Engineering Research Council of Canada, Undergraduate Student Research Award ($6,000 CAD).

Eva Morgand & Soley Siegel (06/2024 – 08/2024). *Building intuitive human-computer interactions with eye movements and sound.* Dept. of Psychology, Neuroscience & Behaviour, McMaster University, Ontario, Canada. Funded by MITACS Globalink Research Internship Award ($6,000 CAD each).

Hannah Fiehn (01/2020 – 07/2022). *Predictors of time spent engaging with unfamiliar music and visual art from a professionally curated online exhibition.* Music Dept., Max Planck Institute for Empirical Aesthetics, Frankfurt a.M., Germany

Alexander Nguyen (09/2021 – 12/2021). *Towards a systematic comparison of computational models of musical expectations.* Music Dept., Max Planck Institute for Empirical Aesthetics, Frankfurt a.M., Germany

Independent Study & Volunteer Students

Betul Asdemir (09/2023 – 04/2024) | **Jackson Shi** (09/2023 – 04/2024) | **Gloria Liu** (09/2023 – 04/2024) | **Kyra Bonus** (09/2023 – 04/2024) | **Megan Klose** (09/2023 – 04/2024) | **Ahmed Saeed** (09/2023 –

04/2024) | **Ruby Nguyen** (09/2017 – 09/2019) | **Lily Brown** (01/2017 – 09/2019) | **Cyril Millendez** (08/2016 – 05/2017)

LIFETIME RESEARCH FUNDING

SUMMARY

Grants as PI	Grants as co-investigator	Total Grants Funding
$ 777,000 CAD	$ 493,460 CAD	$ 1,270,460 CAD

AWARDED

Evaluating social communication among Autistic children in music therapy. Renée Fleming Neuroarts Investigator Award, Neuroarts Blueprint Initiative. Operating Grant. PIs: Pablo Ripollés, Anna Palumbo; Co-Investigators: Lauren Fink, Alan Turry. ($25,000 USD), 2025-26

Disseminating new modes of creativity and audience immersion at the intersection of performance and technology. Social Sciences and Humanities Research Council of Canada, Connection Grant. Operating Grant. PI: John Iversen; co-PIs: Lauren Fink & Laurel Trainor ($64,225 CAD), 2024–2025.

The role of brain-viscera coupling in shaping subjective experience and social interaction, Canadian Foundation for Innovation, John R Evans Leaders Fund & Ontario Research Fund Small Infrastructure Fund. Infrastructure Grant. PI: Lauren Fink ($500,000 CAD), 2024-26

Mobile eye-tracking in the concert hall: Using ocular measures to index spatiotemporal attention and augment audience engagement. Natural Sciences and Engineering Research Council of Canada, Discovery Grant. Operating Grant. PI: Lauren Fink ($257,500 CAD), 2023-27

A novel approach to assess listening effort in older adults based on eye movements. Canadian Institutes of Health Research. Operating grant. PI: Björn Herrmann. Co-PIs: Jennifer Ryan, Ingrid Johnsrude, Lauren Fink. ($395,000 CAD), 2023-27

SOMA: Seminar Outreach for Minority Advocacy. Diversity Inclusion and Innovation Grant, University of California, Davis, CA, USA. Operating Grant. co-PIs: Lauren Fink & Milagros Copara, ($5,000 USD), 2017

Simultaneous eye-tracking and electroencephalography during an auditory deviance detection task. Research Exchange Grant, University of California Music Experience Research Community Initiative; Host Institution: University of California, San Diego. Operating Grant. PI: Lauren Fink ($3,500 USD), 2016

Matriculaphony: A Percussive Circus on Van Meter Ames' A Book of Changes. Undergraduate Research Council Grant, University of Cincinnati, OH, USA. Operating Grant. PI: Lauren Fink ($3,000 USD), 2012-13

False belief attribution: An investigation of the neural pattern account. Summer Undergraduate Mentored Research Grant, University of Cincinnati, OH, USA. Operating Grant. Graduate PI: Ayca Mazman; undergraduate PI: Lauren Fink ($3,000 USD), 2011

PENDING

LIVELab: Transforming large-group social neuroscience research (Under Review), CFI-IF/Ontario Large Infrastructure Fund. Infrastructure grant. PIs: Laurel Trainor and Lauren Fink. Co-PIs: John Iversen, Ian Bruce, Ranil Sonnadara, Janine Loehr, Peter Vuust, Rick Monture, Guillaume Dumas, Simone Dalla Bella (13,035,844 CAD), 2026–2033.

LIFETIME PUBLICATIONS

SUMMARY

Lifetime peer-reviewed publications: **23**

Number of unique co-authors: **61**, or 216 if counting "manyLabs" collaborations

Citations: 546 **h-index: 11** **i10-index: 12** (Source: *Google Scholar*; accessed 09/07/25)

Open-source software toolboxes: 5

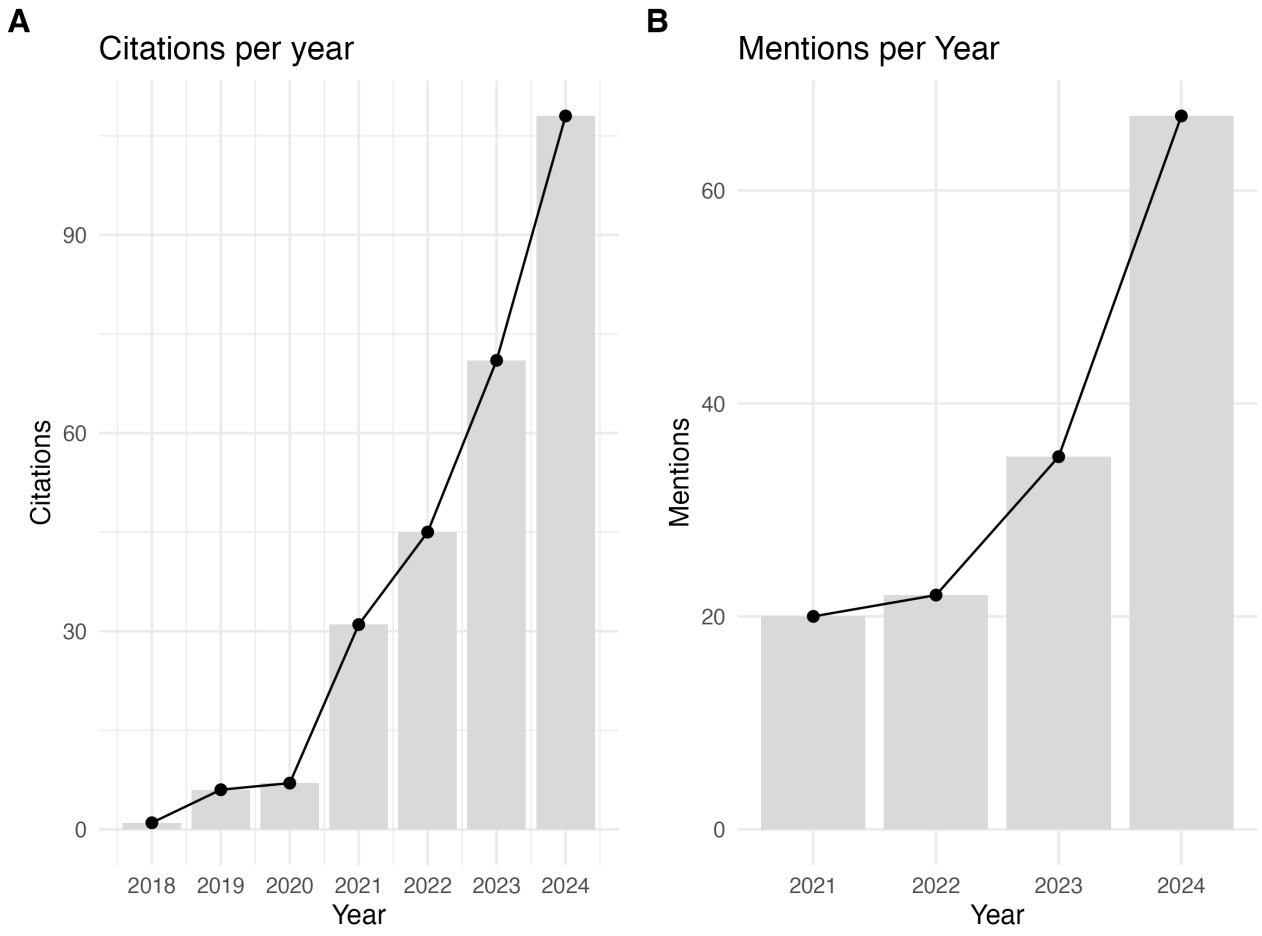

Figure 1. DOI-based Citation, & Mentions, and Collaborations (2018–2024)

A. Annual citations of my publications (Source: *OpenAlex*; current year excluded). **B.** Mentions of my papers per year across the web (Source: *Crossref Event Data*; current year excluded). Note that *OpenAlex* and *Crossref* have more conservative estimates than *Google Scholar*, as they update less frequently.

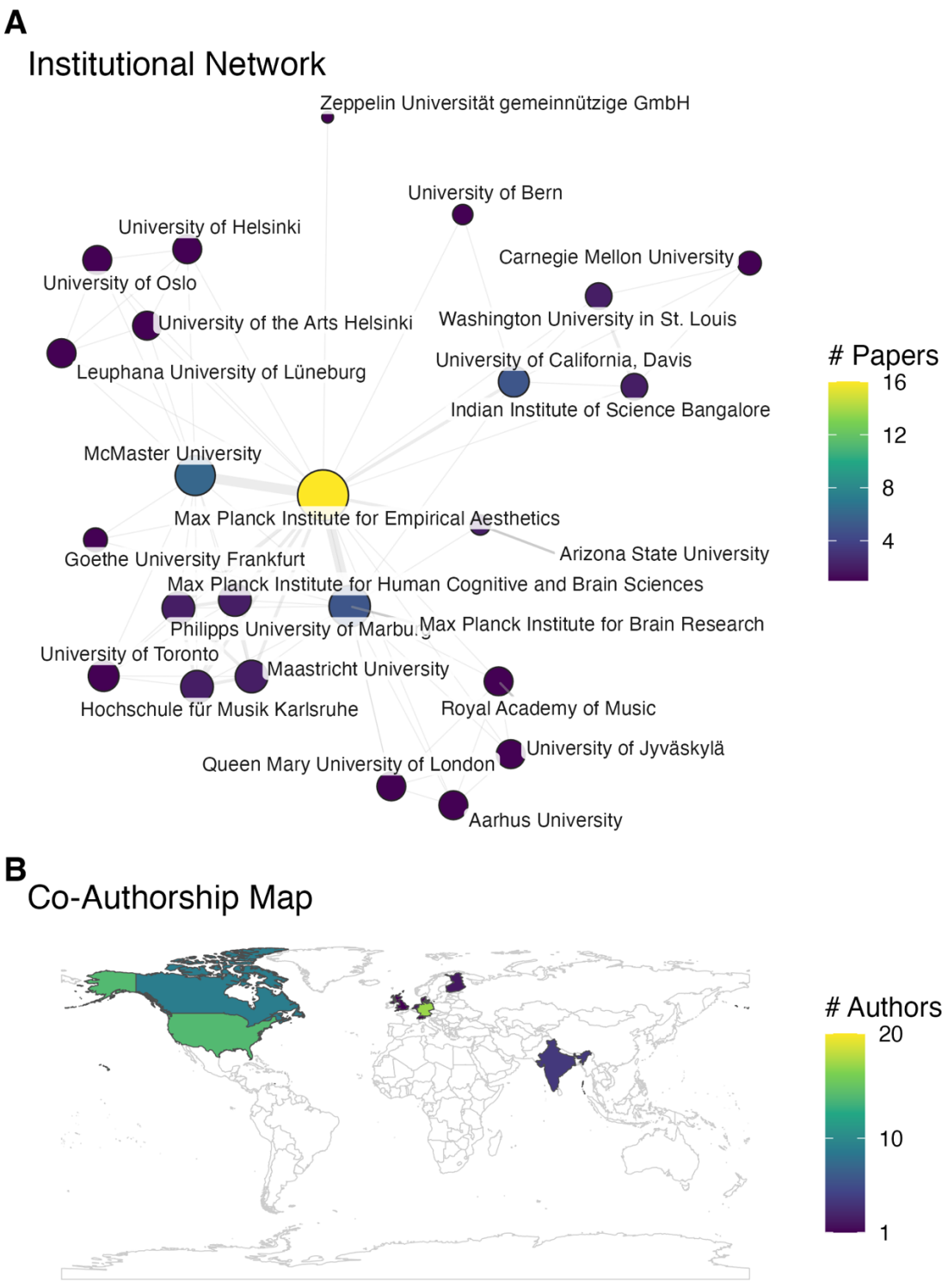

Figure 2. Collaborating Institutions and Co-Authors (2018–2024)

A. My institutional co-authorship network (Source: *OpenAlex*). Node fill color = number of papers with each institution; node size = degree (number of institutional partners); edge width = number of co-authored papers. Only top institutions shown. **B.** Co-author countries, with color showing number of unique authors per country (Source: *OpenAlex*; white = none).

A) PEER REVIEWED

(i) Journal articles

= indicates co-first authorship, or co-last authorship (equal contribution)

* indicates student mentee

*Czepiel, A., **Fink, L.**, Scharinger, M., Seibert, C., Wald-Fuhrmann, M. & Kotz, S. (2025). **Audio-visual concert performances synchronize an audience's heart rates.** *Ann NY Acad Sci. 1-16.* http://doi.org/10.1111/nyas.15279

Fink, L., *Fiehn, H. & Wald-Fuhrmann, M. (2024). **The role of audiovisual congruence in aesthetic appreciation of contemporary music and visual art.** *Scientific Reports 14,* 20923. https://doi.org/10.1038/s41598-024-71399-y

Fink, L., Simola, J., Tavano, A., Lange, E., Wallot, S., & Laeng, B. (2024). **From pre-processing to advanced dynamic modeling of pupil data.** *Behavior Research Methods.* https://doi.org/10.3758/s13428-023-02098-1

*Saxena, S., =**Fink, L.**, =Lange, E. (2024). **Deep learning models for webcam eye-tracking in online experiments.** *Behavior Research Methods.* https://doi.org/10.3758/s13428-023-02190-6

Lange, E., & **Fink, L.** (2024**). Eye-blinking, musical processing, and subjective states – A methods account.** *Psychophysiology, 00*(e14350). https://doi.org/10.1111/psyp.14350

*Czepiel, A., **Fink, L.**, Seibert, C., Scharinger, M., Kotz, S. (2023). **Aesthetic and physiological effects of naturalistic multimodal music listening.** *Cognition 239*, 105537. https://doi.org/10.1016/j.cognition.2023.105537

Coretta, S., Casillas, J.V., […] **Fink, L.**, […] & Timo B. Roettger. (2023). **Multidimensional signals and analytic flexibility: Estimating degrees of freedom in human speech analyses.** *Advances in Methods and Practices in Psychological Science, 6*(3). https://doi.org/10.1177/25152459231162567

Fink, L., Alexander, P. & Janata, P. (2022). **The Groove Enhancement Machine (GEM): A multi-person adaptive metronome to manipulate sensorimotor synchronization and subjective enjoyment.** *Frontiers in Human Neuroscience 16*:916551. https://doi.org/10.3389/fnhum.2022.916551

Wittstock, S., Sperber, L., Kirk, G., McCarty, K., de Sola-Smith, K., Wade, J., Simon, M., **Fink, L.** (2022). **Making what we know explicit: Perspectives from graduate writing consultants on supporting graduate writers.** *Praxis: A Writing Center Journal, 19*(2). http://dx.doi.org/10.26153/tsw/48177

*Czepiel, A., **Fink, L.K.**, Fink, L.T., Wald-Fuhrmann, M., Tröndle, M., & Merrill, J. (2021). **Synchrony in the periphery: inter-subject correlation of physiological responses during live music concerts.** *Scientific Reports 11,* 22457. https://doi.org/10.1038/s41598-021-00492-3

=**Fink, L.,** =Warrenburg, L. A., Howlin, C., Randall, W. M., Hansen, N. C., & Wald-Fuhrmann, M. (2021). **Viral Tunes: Changes in musical behaviours and interest in coronamusic predict socio-emotional coping during COVID-19 lockdown.** *Humanities & Social Sciences Communications, 8*(120). https://doi.org/10.1057/s41599-021-00858-y

=Durojaye, C., =**Fink, L.**, Roeske, T., Wald-Fuhrmann, M. & Larrouy-Maestri, P. (2021). **Perception of Nigerian talking drum performances as speech-like vs. music-like: the role of familiarity and acoustic cues.** *Frontiers in Psychology 12*:652673. https://doi.org/10.3389/fpsyg.2021.652673

Sharma, N., Krishnamohan, V., Ganapathy, S., Gangopadhayay, A. & **Fink, L**. (2020). **Acoustic and linguistic features influence talker change detection.** *JASA Express Letters 147*(5). https://doi.org/10.1121/10.0002462

Fink, L., Lange, E., & Groner, R. (2019). **The application of eye-tracking in music research.** *Journal of Eye Movement Research, 11*(2):1. https://doi.org/10.16910/jemr.11.2.1

Fink, L., Hurley, B., Geng, J. & Janata, P. (2018). **A linear oscillator model predicts dynamic temporal attention and pupillary entrainment to rhythmic musical patterns.** *Journal of Eye Movement Research, 11*(2):12. https://doi.org/10.16910/jemr.11.2.12

Hurley, B., **Fink, L.**, & Janata, P. (2018). **Mapping the dynamic allocation of attention in musical patterns.** *Journal of Experimental Psychology: Human Perception & Performance, 44*(11), 1694-1711. https://doi.org/10.1037/xhp0000563

Fink, L. (2016). **The Greatest**. *Pulse Special Issue of Ethnomusicology Review/Sounding Board.* https://ethnomusicologyreview.ucla.edu/content/greatest

(ii) Conference Proceedings

*Saxena, S., *Visram, A., *Lobo, N., *Mirza, Z., *Khan, M., *Pirabaharan, B., *Nguyen, A., **Fink, L.** (2025). **SocialEyes: Scaling mobile eye-tracking to multi-person social settings.** *In Proceedings of the CHI '25 Conference on Human Factors in Computing Systems, Apr. 26-May 1, Yokohama, Japan.* https://dl.acm.org/doi/10.1145/3706598.3713910

Fink, L. (2023). **Eye movement patterns when playing from memory: Examining consistency across repeated performances and the relationship between eyes and audio.** *In Proceedings of the 17th International Conference on Music Perception and Cognition, Aug. 24-28, Tokyo, Japan.* Open access at: psyarxiv.com/tecdv

*Saxena, S., Lange, E. & **Fink, L.** (2022). **Towards efficient calibration for webcam eye-tracking in online experiments.** *In 2022 Symposium on Eye Tracking Research and Applications (ETRA '22), June 08–11, 2022, Seattle, WA, USA.* https://doi.org/10.1145/3517031.3529645

Fink, L. (2021). **Computational models of temporal expectations.** *Proceedings of the Future Directions of Music Cognition International Conference, Columbus, OH, USA.* https://doi.org/10.18061/FDMC.2021.0041

Sharma, N., Krishnamohan, V., Ganapathy, S., Gangopadhayay, A. & **Fink, L**. (2020). **On the impact of language familiarity in talker change detection.** *Proceedings of the 2020 IEEE International Conference on Acoustics, Speech, and Signal Processing* (ICASSP)*, Barcelona, Spain,* pp. 6249 – 6253. https://doi.org/10.1109/ICASSP40776.2020.9054294

(iii) Community engagement and knowledge exchange

Fink, L., Durojaye, C., Roeske, T., Wald-Fuhrmann, M. & Larrouy-Maestri, P. (2022). **The dùndún drum helps us understand how we process speech and music.** *Frontiers for Young Minds, 10,* 755390. https://doi.org/10.3389/frym.2022.755390

B) NOT PEER REVIEWED

(i) Books

Lane, J. & **Fink, L.**, Eds. (2017). **Allen Otte Folio.** A collection of percussion pieces, distributed by Media Press Inc. https://mediapressmusic.com/allen-otte-folio-various/

(ii) Contributions to books

Fink, L. (2017). **Chance operations in neuroscience.** In Lane, J. and L. Fink (Eds.), *Allen Otte Folio,* pp. 17-20. https://mediapressmusic.com/allen-otte-folio-various/

(iii) Research creation

Workshop Creator & Facilitator, **Learning Pupillometry: From theory to analyses** (2 days; 4 hrs total, 2024) Methods Excellence Workshops, University of Konstanz, Germany. https://beatlab.mcmaster.ca/KonstanzWorkshopSummary.html

*Flannery, M., & **Fink, L.** (2025). BEATmonitor (Version v0.2.250427) [Computer software]. https://doi.org/10.5281/zenodo.15297806

*Shi, J., *Saxena, S., & **Fink, L.** (2025). AVOKE: an open-source web-based experimentation toolbox for evoking audiovisual responses [Computer software]. https://doi.org/10.5281/zenodo.16581810

*Saxena, S., *Visram, A., *Lobo, N., *Mirza, Z., *Khan, M., *Pirabaharan, B., *Nguyen, A., & **Fink, L.** SocialEyes [Computer software]. https://doi.org/10.5281/zenodo.16582144

Fink, L. (2023). Pupil Tutorial [Computer software]. https://github.com/lkfink/pupilTutorial

Fink, L., Alexander, P., & Janata, J. (2022). GEM [Computer software]. https://github.com/janatalab/GEM

(iv) Journal Abstracts

Fink, L., Hurley, B., Geng, J., Lange, E., & Janata, P. (2019). **A computational model of rhythmic auditory attention predicts the pupillary response to music.** *Journal of Eye Movement Research*, *12*(7).

Lange, E. B., Thiele, D., **Fink, L.,** & Kuijpers, M. (2019). **Narrative aesthetic absorption into audiobooks: Acoustics, crossmodal coupling and subjective states are related.** *Journal of Eye Movement Research*, *12*(7).

D) SUBMITTED FOR PUBLICATION

Cui, M.E., Verno-Lavigne, E., *Saxena, S., **Fink, L.**, Herrmann, B. (2025, submitted). **Mobile eye-tracking glasses capture ocular and head markers of listening effort.** Preprint on BioRxiv: https://www.biorxiv.org/content/10.1101/2025.09.17.676957v1

*Bonus, K., *Flannery, M., & **Fink, L.** (2025, submitted). **Maladaptive music listening: A systematic review, thematic analyses, and meta-analysis.**

*Saxena, S., *Shi, J., & **Fink, L.** (2025, submitted). **AVOKE: An open-source toolbox for audiovisual web experiments in jsPsych.**

E) MANUSCRIPTS IN PREPARATION OR REVISION

Damsma, A., Cannon, J., **Fink, L.**, Doelling, K., Grahn, J., Honing, J., Kaplan, T., Large, E., & Bouwer, F. (2025, in revision). **Perspectives on modeling rhythmic expectations.**

Fink, L. (2025, invited & in revision). **Data Visualization.** *Oxford Handbook of Systematic Empirical Research in the Arts*, eds. Knoop, C., Wald-Fuhrmann, M.

Fink, L. (2025, invited & in prep). **Open-source methods for affordable and scalable studies**. In *Live Concert Research: Exploratory Concepts, Methods and Findings*, eds. D'Amario, S., Bishop, L., & Refsum Jensenius, A.

*Schlichting, J. & **Fink, L.** (2025, in prep). **Media advocacy promotes in-person and online audiences' engagement with social justice cause through empathy.**

Speelman, J., Orifici, M., Neo, S. […], **Fink, L.**, […] & Primbs, M. (2025, in prep). **A many-analyst many-labs investigation of the generic masculine effect**.

Fink, L., *Hörster, M., Poeppel, D., Wald-Fuhrmann, M., & Larrouy-Maestri, P. (2023, in revision). **Features underlying speech versus music as categories of auditory experience.** *Preprint on PsyArxiv:* https://psyarxiv.com/2635u

Tavano, A., Blohm, S., Knoop, C.A., Muralikrishnan, R., **Fink, L.**, Scharinger, M., Wagner, V., Thiele, D., Ghitza, O., Ding, N., Menninghaus, W., Poeppel, D. (in revision). Neural harmonics of syntactic structure. Preprint on BioRxiv: https://www.biorxiv.org/content/10.1101/2020.04.08.031575v3

PRESENTATIONS AT MEETINGS

SUMMARY

30 invited talks in **7 different countries**

68 conference talks, including 3 symposia, in **12 different countries**

Note: Presenter Name is underlined. Where no name is indicated, Fink, L. is the presenter.

* indicates student mentee

A) INVITED

Sept. 2025. **Social eye-tracking and cardiac monitoring in diverse everyday contexts.** Montreal Open Tools Symposium, *Montréal Neurological Institute & McGill University, Montréal, Québec, Canada.*

Sept. 2025. **Analyzing data with SocialEyes.** Montreal Open Tools Symposium, *Montréal Neurological Institute & McGill University, Montréal, Québec, Canada.*

Jun. 2025. **A brief tour of the social neuroscience of music.** Laryngology Conference, *The Mount Sinai Hospital, New York, NY, USA.*

Jun. 2025. Saxena, S., Uppal, A., Lee, M.S., Cauwenberghs, G., & Fink, L. **In-ear EEG and eye-tracking to study audiovisual interactions in naturalistic settings**. CogHear Workshop*, University of Maryland, College Park, MD, USA.*

Apr. 2025. **Broadening the toolset of neuromusic research.** BRAMS-CRBLM Lecture Series, *Université de Montréal, Québec, Canada.*

Jan. 2025. Roundtable Discussion Panelist. **Open Research in Practice.** Research Data Management Community of Practice, *McMaster University Library, ON, Canada.*

Nov. 2024. **Research at the intersection of music, cognitive neuroscience, computer science & social justice.** *Toronto Auditory Research Group, Toronto, ON, Canada.*

Nov. 2024. **The past, present and future of the LIVELab and large group studies of creative human interaction.** Keynote, 20th Annual Neuromusic Conference*, Hamilton, ON, Canada. https://www.youtube.com/watch?v=3UqfVlysEeA&ab_channel=McMasterLIVELab*

Mar. 2024. **Learning Pupillometry: From theory to analyses.** (2 days; 4 hrs total) Methods Excellence Workshops*, University of Konstanz, Germany.* https://www.ling.uni-konstanz.de/forschung/workshops/

Dec. 2023. **From individual to social dynamics of musical engagement.** ARiEAL: The Centre for Advanced Research in Experimental and Applied Linguistics, *McMaster University, Hamilton, ON, Canada.*

May 2023. **Mobile eye-tracking methodology.** Applied Psychology and Human Development Student Association, Ontario Institute for Studies in Education, *University of Toronto, Canada.*

Apr. 2023. **From the lab to the concert hall: Studying musical engagement in individual and social contexts.** Graduate Seminar, Psychology, *University of Guelph, Ontario, Canada (virtual).*

Mar. 2023. **Panel discussant on career development panel for postdoctoral women in science.** Sign Up! *EAF Berlin, Germany (virtual).*

Mar. 2023. **The proactive audience: Matching music and image—from perception to aesthetic evaluation.** Panel Discussant at the Music as Image and Metaphor Exhibition, *Kentler International Drawing Space, Brooklyn, NY, USA.* https://www.kentlergallery.org/Detail/events/540

Feb. 2023. **Eye-tracking in musical contexts: what we've learned and where we're going.** Graduate Seminar, Kinesiology & Health Sciences, *University of Waterloo, Ontario, Canada.*

Feb. 2023. **Pupillometry and eye-tracking as tools to study auditory attention.** Center for Cognitive Science, *Albert-Ludwigs-Universität Freiburg, Freiburg, Germany (virtual).*

Nov. 2022. **The cognitive neuroscience of music: What music can teach us about the nervous system and vice versa.** Sign Up! Alumnae Meeting, Harnackhaus, *EAF Berlin, Germany.*

Nov. 2022. **Timing is everything: The role of synchrony during musical engagement.** Brain and Culture Lecture, *Karolinska Institute, Stockholm, Sweden (virtual).*

June 2022. **Pupillometry, Eye-tracking, and music: An overview and workshop.** ERC-Project SloMo, *University of Hamburg, Germany.*

Apr. 2022. **Attention, arousal, and connection: The effects of music across the nervous system and individuals.** Seminar Outreach for Minority Advocacy, *Center for Neuroscience, University of California, Davis, CA, USA.*

Apr. 2022. **The Groove Enhancement Machine (GEM): A multi-person adaptive metronome to manipulate sensorimotor synchronization and subjective enjoyment.** Graduate Student Research Day, Dept. of Psychology, Neuroscience and Behaviour, *McMaster University, Hamilton, Ontario, Canada (virtual).*

Apr. 2022. **Music & eye-tracking research: An overview of theory and methods.** *Northern Network for Empirical Music Research, Liverpool, UK (virtual).*

Apr. 2022. **Analyzing pupil time series.** Pupillometry Workshop at RITMO Centre for Interdisciplinary Studies in Rhythm, Time and Motion, *University of Oslo, Norway.* Recording available: https://tinyurl.com/22xky5j4

Dec. 2021. **Dynamics of musical engagement across the nervous system.** Department of Psychology, Neuroscience, and Behavior, *McMaster University, Hamilton, Ontario, Canada (virtual).*

May 2021. **Predicting attentional fluctuations during music listening.** Language and Computation in Neural Systems Research Group, *Max Planck Institute for Psycholinguistics, Nijmegen, The Netherlands (virtual).*

Feb. 2021. **Pupil dynamics reflect listeners' attention and absorption.** Music Cognition Lab of Elizabeth Margulis, *Princeton University, New Jersey, USA (virtual).*

Feb. 2019. **Modeling pupillary entrainment to music and absorptive music listening experiences.** Center for Computer Research in Music and Acoustics, *Stanford University, Palo Alto, CA, USA.*

Sept. 2018. **Pupillometry as an auditory research tool.** UC Davis Neuroscience Retreat, *Bodega Bay Marine Laboratory, Bodega Bay, CA, USA.*

Apr. 2018. **The Groove Enhancement Machine.** Center for Computer Research in Music and Acoustics, *Stanford University, Palo Alto, CA, USA.*

Mar. 2018. **Seeing in time: Rhythmic music systematically alters pupil dynamics.** *Max Planck Institute for Empirical Aesthetics, Frankfurt a.M., Germany.*

B) CONTRIBUTED

Xiao, G. & Troje, N. (2025, Aug.). **The social symphony of gaze: New perspectives on eye contact in interaction**. *Symposium at the European Conference on Visual Perception (ECVP47), Mainz, Germany.*

*Saxena, S. & **Fink, L. An automated method for multi-person mobile eye-tracking in natural contexts involving shared gaze goals**. *Talk at the European Conference on Visual Perception (ECVP47), Mainz, Germany.*

Fink, L., *Flannery, M., & *Saxena, S. (2025, Aug.). **Visual art, spoken voices, and the physiology of preference.** *Talk at the Visual Science of Art Conference, Wiesbadan, Germany.*

*Schlichting, J. & **Fink, L.** (2025, Jul.). **How social justice advocacy through music performance influences audiences' charitable attitudes and behaviours**. *Talk presented at the 18th International Conference on Music Perception & Cognition (ICMPC18- SIMCAM 17), Sao Paulo, Brazil.*

*Flannery, M. & **Fink, L.** (2025, Jul.). **Multi-person photoplethysmography using open-source smartwatch technology: Development, validation, and applications in naturalistic music listening.** *Talk presented at the 18th International Conference on Music Perception & Cognition (ICMPC18- SIMCAM 17), Sao Paulo, Brazil.*

Chr. Hansen, N. Mavrolampados, A., Mason, B., **Fink, L.**, Saarikallio, S. & Howlin, C. (2025, Jul.). **Who listened to what during the pandemic?** *Poster presented at the 18th International Conference on Music Perception & Cognition (ICMPC18- SIMCAM 17), Sao Paulo, Brazil.*

*Liu, G., *Schlichting, J. & **Fink, L. The self-reference effect in science communication: Does personal relevance drive social media engagement?** *Best poster presented at the 13th Annual McMaster Conference on Education and Cognition, Hamilton, ON, Canada.*

*Verno-Lavigne, E., *Cui, M. E., *Saxena, S., **Fink, L.**, Herrmann, B. (2025, Feb.). **Eye movement decreases during challenging listening conditions: evidence from mobile eye-tracking glasses.** *LOVE Conference 2025, Niagara Falls, ON, Canada.*

*Flannery, M., & **Fink, L.** (2024, Nov.). **Naturalistic measurement of multi-person cardiac activity using open source smartwatch technology.** *20th Annual Neuromusic Conference, Hamilton, ON, Canada.*

*Schlichting, J., *Saxena, S., *Flannery, M., & **Fink, L.** (2024, Nov.). **A multi-method exploration of the impact of music advocacy.** *20th Annual Neuromusic Conference, Hamilton, ON, Canada.*

*Saxena, S., *Schlichting, J., *Flannery, M., & **Fink, L.** (2024, Nov.). **Eye tracking for collaborative music experiences: A framework for recording and analysing collective attention in naturalistic concert settings.** *20th Annual Neuromusic Conference, Hamilton, ON, Canada.*

*Segreto, M., Hove, M., Bosnyak, D., **Fink, L.**, Trainor, L., & Cameron, D. (2024, Nov.). **How does bass make us move? Investigating the sensory and physiological mechanisms of very low frequencies' effect on movement.** *20th Annual Neuromusic Conference, Hamilton, ON, Canada.*

Fink, L. (2024, Sept.). **Introduction to advanced analysis techniques: Analyzing the pupil time series,** in "Assessing listening effort: Pupillometry for dummies" workshop, organized by Adriana Zekveld, *World Congress of Audiology, Paris, France.*

Fink, L. (2024, Sept.). **Towards more mobile, modular, scalable concert research methodologies.** *Workshop on Concert Research, Centre for Interdisciplinary Studies in Rhythm, Time & Motion, U. Oslo, Norway.* Recording available: *https://osf.io/p4r2w?view_only=07f8bfe1b2eb4ffca7f18574d5752c2b*

*Schlichting, J., *Saxena, S., *Flannery, M., & **Fink, L.** (2024, Sept.). **Musik und sozialpolitisches Engagement: Hintergrundinformationen und gemeinsame Anwesenheit beeinflussen Publikumsreaktionen und begünstigen prosoziale Handlungen**. *Hochschule für Musik und Theater München, Germany.*

Fink, L. (2024, Jul.). **Costs and benefits of high-stakes, single-shot, multi-person data collection events.** *Society for Music Perception & Cognition, Banff Centre for Arts and Creativity, Alberta, CA.*

*Schlichting, J., *Saxena, S., *Flannery, M., & **Fink, L.** (2024, Jul.). **Social justice advocacy through music performance: Do contextual information and social co-presence shape audience reactions and behavior?** *Society for Music Perception & Cognition, Banff Centre for Arts and Creativity, Alberta, CA.*

*Saxena, S., *Flannery, M., *Schlichting, J. & **Fink, L.** (2024, Jul.). **Gaze behavior in online and in-person concert and film viewing: A large-scale naturalistic eye-tracking study.** *Society for Music Perception & Cognition, Banff Centre for Arts and Creativity, Alberta, CA.*

*Flannery, M., *Saxena, S., *Schlichting, J. & **Fink, L.** (2024, Jul.). **Investigating the influence of contextual information on cardiac activity in response to musical performance.** *Society for Music Perception & Cognition, Banff Centre for Arts and Creativity, Alberta, CA.*

*Schlichting, J., *Saxena, S., *Flannery, M., & **Fink, L.** (2023, Oct.). **Social justice advocacy through music performance: Testing the effect of performance context and audience physiological responses.** *19th Annual Neuromusic Conference*, *Hamilton, Ontario, Canada.*

*Flannery, M., & **Fink, L.** (2023, Oct.). **Automating music stimuli creation and analyses: A music synthesis algorithm for producing ground truth data.** *19th Annual Neuromusic Conference*, *Hamilton, Ontario, Canada.*

*Saxena, S. & **Fink, L.** (2023, Oct.). **Synchronized multi-person eye-tracking in dynamic scenes.** *Poster presented at the 19th Annual Neuromusic Conference, Hamilton, Ontario, Canada.*

*Saxena, S., *Fiehn, H., *Shi, J., & **Fink, L.** (2023, Aug.). Cross-modal correspondence between contemporary art and music: from perception to aesthetic evaluation. *Talk presented at the 17th International Conference on Music Perception & Cognition (ICMPC17-APSCOM7), Tokyo, Japan.*

*Flannery, M., Woolhouse, M., **Fink, L.** (2023, Aug.). **Models trained on procedurally generated stimuli predict human judgments of Music Acoustic Features in real-world music.** *Poster presented at the 17th International Conference on Music Perception & Cognition (ICMPC17-APSCOM7), Tokyo, Japan.*

*Czepiel, A., **Fink, L.**, Seibert, C., Scharinger, M., Wald-Fuhrmann, M. Kotz, S. (2023, Aug.) **Cardiorespiratory synchrony to music and among audience members during a live concert**. *Talk presented at the 17th International Conference on Music Perception & Cognition (ICMPC17-APSCOM7), Tokyo, Japan.*

Fink, L. (2023, Aug.). **Eye movement patterns when playing from memory: Examining consistency across repeated performances and the relationship between eyes and audio.** *Talk presented at the 17th International Conference on Music Perception & Cognition (ICMPC17-APSCOM7), Tokyo, Japan.* https://psyarxiv.com/tecdv/

Damsma, A., Bouwer, F., **Fink, L.**, Cannon, J., Doelling, K., Grahn, J., Honing H., & Kaplan, T. (2023, Aug.). Modelling rhythm perception beyond the beat. *Symposium presented at the 17th International Conference on Music Perception & Cognition (ICMPC17-APSCOM7), Tokyo, Japan.*

Fink, L., *Nguyen, A., & Janata, P. Modeling Rhythmic Expectations: Approaches, Evaluation Metrics, and a Case Study.

Fink, L., Hörster, M., Poeppel, D., Wald-Fuhrmann, M., & Larrouy-Maestri, P. (2022, Sept.). **Western Listeners' perception of music and speech is reflected in acoustic and semantic descriptors.** *Poster (virtual) presented at the Biology-culture relationships in the evolution of language and music workshop, at the Joint Conference on Language Evolution, Kanazawa, Japan.*

*Saxena, S., **Fink, L.**, & Lange, E. (2022, Aug.). **An online experiment with deep learning models for tracking eye movements via webcam.** *Accepted talk at the European Conference on Eye Movements, Leicester, UK.*

Linna, J., Kushan, M., Beck, J., **Fink, L.**, Margulis, L. (2022, Aug.). **Using pupillometry to investigate the effect of meditation on musical listening.** *Poster presented the Society for Music Perception & Cognition, Portland, OR.*

Lange, E. & **Fink, L.** (2022, July). **Eyeblinks as indices of subjective states during music listening: Methodological considerations.** *Talk presented the Conference on Music & Eye-Tracking, Frankfurt am Main, Germany.* https://vimeo.com/728532868/5c8f91824d

Fink, L., *Saxena S., & Lange, E. (2022, Jul.). **Consistency of eye movements across multiple memorized performances: A mobile eye-tracking pilot study.** *Talk presented the Conference on Music & Eye-Tracking, Frankfurt am Main, Germany.* https://vimeo.com/728534533/8140ab1cf3

Basiński, K., Domżalski, T., **Fink, L.**, & Szalewska, D. (2022, Jul.). **The effect of harmonicity on pupil dilation response in an auditory oddball task.** *Poster presented the Conference on Music & Eye-Tracking, Frankfurt am Main, Germany.*

*Saxena, S., Lange, E. & **Fink, L.** (2022). **Towards efficient calibration for webcam eye-tracking in online experiments.** *Poster presented at the 2022 Symposium on Eye Tracking Research and Applications (ETRA '22), June 08–11, 2022, Seattle, WA, USA.*

*Czepiel, A., **Fink, L.**, Seibert, C., Scharinger, M., Kotz, S. (2022, May). **Physiological correlates of aesthetic and naturalistic music concert experience.** *Poster presented at the International Conference of Cognitive Neuroscience, Helsinki, Finland.*

Fink, L., *Hörster, M., Poeppel, D., Wald-Fuhrmann, M., & Larrouy-Maestri, P. (2022, Apr.). **Bonfire happiness or a scratchy affair?: Patterns in free labelling and categorization of percussive stimuli.** *Poster presented at the Cognitive Neuroscience Society Annual Meeting, San Francisco, CA, USA.*

Lange, E. & **Fink, L.** (2022, Feb.). **Eye-tracking as a method to investigate music listening experiences.** *Talk presented at the Tagung experimentell arbeitender Psychologen (TeaP).*

*Hörster, M., **Fink, L.**, Wald-Fuhrmann, M., Poeppel, D. & Larrouy-Maestri, P. (2021, Nov.). **Speech, music, or "raindrops on drums": Labels influence the categorization of sounds.** *International conference of students of systematic musicology (SysMus21), Aarhus, Denmark.*

Lange, E. & **Fink, L.** (2021, Aug.). **What is the relation between musical features and spontaneous or restricted blink activity?** Blick und Bewegung Symposium, organized by Jörg Mühlhans. *Talk (virtual) presented at the DAGA 47. Deutsche Jahrestagung für Akustik, Vienna, Austria.*

Fink, L., Janata, P., Ganapathy, S., Furukawa, S., Lange, L. (2021, Aug.). **The pupil as an index of musical rhythmic structure and listeners' absorption.** Blick und Bewegung Symposium, organized by Jörg Mühlhans. *Talk (virtual) presented at the DAGA 47. Deutsche Jahrestagung für Akustik, Vienna, Austria.*

Fink, L., Janata, P., Ganapathy, S., Furukawa, S., Lange, L. (2021, July). **Spectral signatures of the pupillary response as an implicit measure of musical absorption.** *Talk (virtual) presented at the International Conference for Music Perception & Cognition.* https://www.youtube.com/watch?v=5bpDhrxUvLg

=Warrenburg, L.A., =**Fink, L.**, Howlin, C., Randall, W. M., +Hansen, N. C., & +Wald-Fuhrmann, M. (2021, July). **Viral Tunes: Changes in musical behaviours and interest in coronamusic predict socio-emotional coping during COVID-19 lockdown.** *Talk (virtual) presented at the International Conference for Music Perception & Cognition.* https://www.youtube.com/watch?v=qnR8fWfyVEo

Larrouy-Maestri, P., **Fink, L.**, Durojaye, C., *Hörster, M., Poeppel, D. & Wald-Fuhrmann, M. (2021, July). **Music or language or both: Effect of the task on the classification of dùndún talking drum stimuli.** *Talk (virtual) presented at the International Conference for Music Perception & Cognition.* https://www.youtube.com/watch?v=vBKJINpRtq8

Lange, E. & **Fink, L.** (2021, July). **Eyeblink activity during music listening.** *Talk (virtual) presented at the International Conference for Music Perception & Cognition.* https://youtu.be/Y7vaASokv24

*Czepiel, A., **Fink, L.**, Seibert, C., Scharinger, M. (2021, July). **Multimodality of music listening: how live versus recorded versions of piano music influence aesthetic, physiological, and neural responses in a concert setting.** *Poster (virtual) presented at the International Conference for Music Perception & Cognition.*

Fink, L., Alexander, P., Janata, P. (2021, June). **The influence of metronome adaptivity and auditory feedback on group tapping.** *Talk presented at the Rhythm Perception & Production Workshop, Oslo, Norway (virtual).* https://www.youtube.com/watch?v=optqIxLbz2k

Fink, L., Janata, P., Ganapathy, S., Furukawa, S., Lange, L. (2021, June). **Spectral signatures of the pupillary response as an implicit measure of musical absorption.** *Poster presented at the Neuromusic VII conference, Aarhus, Denmark (virtual).*

*Czepiel, A., **Fink, L.K.**, Fink, L.T., Wald-Fuhrmann, M., Tröndle, M., & Merrill, J. (2021, June). **Inter-subject correlation of physiological responses during live musical performances.** *Poster presented at the Neuromusic VII conference, Aarhus, Denmark (virtual).*

*Czepiel, A., **Fink, L.**, Seibert, C., Scharinger, M. (2021, Mar). **Multimodality of music listening: how live versus recorded versions of piano music influence self-report and physiological responses.** *Talk (virtual) presented at the Tagung experimentell arbeitender Psychologen (TeaP).*

=**Fink, L.,** =Howlin, C., Randall, W., Warrenburg, L., Hansen, N.C., Wald-Fuhrmann, M. (2020, Sept.) **Music as a tool for socio-emotional coping during Covid-19 pandemic lockdown.** *Talk (virtual) presented at the Society for Education, Music, and Psychology Research.*

*Czepiel, A., Merrill, J., **Fink, L.,** Egermann, H., Wald-Fuhrmann, M. (2020, Sept.) **Tempo and key clarity synchronise physiology in classical concert audiences.** *Poster (virtual) presented at the Deutschen Gesellschaft für Musikpsychologie Virtuelle Postertagung.*

Lange, E., Zweck, F., Sinn, P., Thiel, D., **Fink, L.,** & Kujipers, M. (2020, Sept.) **Eye-tracking as method to investigate experiences of aesthetic absorption.** *Poster (virtual) presented at the Deutschen Gesellschaft für Musikpsychologie Virtuelle Postertagung.*

Fink, L., Hurley, B., Geng, J., Lange, E., & Janata, P. (2019, Aug.). **A computational model of rhythmic auditory attention predicts the pupillary response to music.** *Talk presented at the European Conference on Eye Movements, Alicante, Spain.*

Lange, E., Thiele, D., **Fink, L.,** & Kuijpers, M. (2019, Aug.). **Narrative aesthetic absorption into audiobooks: Acoustics, cross-modal coupling and subjective states are related**. *Poster presented at the European Conference on Eye Movements, Alicante, Spain.*

Fink, L., Alexander, P., Janata, J. (2019, March). **Bringing groups of people into greater temporal and psychological synchrony using a multi-person adaptive metronome.** *Poster presented at the Cognitive Neuroscience Society Meeting, San Francisco, CA.*

Mikovits, M., Sperber, L., **Fink, L.** & Prebel, J. (2019, March). **Writing fellows as agents of transfer: Training in threshold concepts to support campus-wide sites of writing.** *Symposium presented at the College Composition and Communication Convention, Pittsburgh, PA.*

Fink, L., Lange, E., Janata, P. (2018, July). **The pupil entrains to prominent periodicities in music.** *Talk presented at the International Conference on Music Perception & Cognition, Graz, Austria.*

Fink, L., Hurley, B., Geng, J., & Janata, P. (2018, May). **Predicting attention and motor responses to musical patterns.** *Poster presented at the Stanford Music & Brain Symposium, Palo Alto, CA.*

Fink, L., Ribeiro, J., & White, V. (2018, March). Transforming graduate writing experiences: A new Writing Across the Curriculum (WAC) certificate program. *Symposium presented at the College Composition and Communication Convention, Kansas City, MO.*

Lange, E. & **Fink, L.** (2017, August). **Using eye-tracking and pupillometry to study rhythmic processing in music and dance.** *Symposium presented at the European Conference on Eye Movements, Wüppertal, Germany.*

Fink, L., Hurley, B., Geng, J., & Janata, P. (2017, August). **Predicting attention to auditory rhythms using a linear oscillator model and pupillometry.** *Talk presented at the Conference on Music & Eye-Tracking, Frankfurt, Germany.*

Fink, L., & Alexander, P., & Janata, P. (2017, July). Fostering empathy and improving focus through the Groove Enhancement Machine: facilitating sensorimotor coordination and cooperation among groups of individuals. *Demonstration presented at the National Academies Keck Futures Initiative Art, Science, Engineering, and Medicine Mid-Cycle Grant Meeting, Boston, MA.*

Hurley, B., **Fink, L.,** & Janata, P. (2017, March). **A resonator model predicts temporal orienting in rhythmic music.** *Proc. of the Cognitive Neuroscience Society Annual Meeting.*

Bright, A., Singleton, J., **Fink, L.,** & Rodger, K. (2017, March). **Cultivating a Rhetorical Consciousness: Supporting Graduate Student Writers Across the Curriculum.** *Symposium presented at the College Composition and Communication Convention, Portland, OR.*

Fink, L., Hurley, B., Geng, J. & Janata, P. (2016, July). **Pupillary and eyeblink responses to auditory stimuli index attention and sensorimotor coupling.** *Proceedings of the 14th International Conference for Music Perception & Cognition,* pg. 788.

Hurley, B., **Fink, L.,** & Janata, P. (2016, July). **Predicting temporal attention in music with a damped oscillator model.** *Proc. of the 14th International Conference for Music Perception & Cognition,* pg. 782.

Fink, L. & Rodger, K. (2016, June). **Mapping neuroscience through professional writing.** *Talk presented at the International Writing Across the Curriculum Conference, Ann Arbor, MI.*

Fink, L. (2015, July). **Eyeblinks as biomarkers of temporal coordination during music cognition**. *Poster presented at the Rhythm Perception & Production Workshop, Amsterdam, Netherlands.*

Fink, L. & Mazman, A. (2013, July). False belief attribution: An investigation of the neural pattern account. *Poster presented at the Society for Philosophy and Psychology Conference, Providence, RI.*

PATENTS, INVENTIONS, AND COPYRIGHTS

Provisional US Patent. MULTI-PERSON EYE-TRACKING FRAMEWORK FOR UNRESTRICTED SOCIAL SETTINGS. Application #63/839,676. Confirmation #1664. Inventors: Lauren Fink & Shreshth Saxena. Owner: McMaster University.

Interviewee. **With eye-tracking glasses and special watches, McMaster studying voter reactions during election debate**. Canadian Broadcasting Corporation (CBC) article about our research during a livestream of the 2025 Federal Leaders English Language Debate (Apr. 17, 2025): https://www.cbc.ca/news/canada/hamilton/mcmaster-undecided-voters-study-1.7512327. This project was also covered on a 13-minute talk radio interview for Global News CKNW (Vancouver) Mornings with Simi: "How technology is making democracy better" on Apr. 18: https://tinyurl.com/cbcFedDeb

Workshop Creator & Facilitator, **Signals, Sensors & Sounds Youth Coding Workshop** (2024), LIVELab, McMaster University, Hamilton, ON, Canada. All materials available online: https://github.com/beatlab-mcmaster/workshop_signalsensorsound

Research Collaborator. **Synaptic Rodeo**: an experimental theatre piece created by LIVELab artists-in-residence Double Pendulum exploring what it means to have a sense of self, and the role of technology in mediating ourselves. The show incorporated our mobile eye-tracking glasses and wrist-based cardiac monitoring. The performance was presented to over 250 people across 3 performances. Teaser: https://www.youtube.com/shorts/5iQVKAjHeIQ

Interviewee & Supervisor. **BEATLab YouTube channel** (https://www.youtube.com/@BEATLab-mcmaster) and **BEATLab Instagram** (https://www.instagram.com/beatlab_mcmaster/). For the past year my lab has been posting weekly science communication content on social media to increase visibility of and public engagement with our research.

Interviewee & Researcher. 12-minute video feature on Canadian news outlet CHCH about **Voices (That's What She Said)** – an audiovisual art/science installation in the LIVELab, in collaboration with local artist Tania LaCaria. Our mobile eye-tracking work is highlighted in segment 2. https://www.chch.com/morning-live/explore-the-impact-women-have-made-at-voices-thats-what-she-said/ (2024)

Keynote Speaker. **The neuroscience of music**. Hamilton Brain Bee, McMaster University, Hamilton, ON, Canada.

Interviewee. **Get up. Stand up. BEAT Lab exploring how music can support social justice**. McMaster Communications piece about *The Innocents* LIVELab study, where we used mobile eye-tracking, heart rate monitoring, and surveys during a music concert and documentary film screening, centered on the issue of wrongful imprisonment. https://science.mcmaster.ca/get-up-stand-up-beat-lab-exploring-how-music-can-support-social-justice/ (2024)

Interviewee. **Music to my… eyeballs?!** 30-minute interview on Applied Science Live podcast about music, eye-tracking, tapping, and more. https://www.appliedsciencelive.com/episodes/dr-lauren-fink

Popular press: Nachrichten. **When Drums Talk: How We Distinguish Speech from Music** (https://nachrichten.idw-online.de/2021/07/13/when-drums-talk-how-we-distinguish-speech-from-music)

Popular press: Forbes. **Coronamusic gives people a sense of belonging. According to research.** https://www.forbes.com/sites/evaamsen/2021/02/27/coronamusic-gives-people-a-sense-of-belonging-according-to-research/

Invited public talk. **Stage presence.** *Ladies Rock Sacramento, Sacramento, CA, USA* (Oct. 2017).

Invited outreach talk. **Writing a personal statement.** Neuroscience Initiative to Enhance Diversity*, U. California, Davis, CA, USA* (Apr. 2017).

Invited outreach talk. **Predicting audiovisual attention over time.** Davis Entrepreneurs Meet-Up, *Davis Roots, Davis, CA, USA* (Nov. 2016).

Invited outreach talk. **Assessing attention to music using eye-tracking.** Stanford Summer Arts Institute, *Stanford University, Palo Alto, CA, USA* (July 2016).

PROFESSIONAL DEVELOPMENT

A) WORKSHOPS

Invited faculty member. **Telluride Neuromorphic Cognition Engineering Workshop**, Telluride, CO, USA (2023 & 2024)

Participant. **Communicating Science to Non-Scientists and Media Training for Researchers**, Max-Planck-Gesellschaft, online (2020)

Participant. **Telluride Neuromorphic Cognition Engineering Workshop**, Telluride, CO (2019)

Participant. **Mini Event-Related Potential Bootcamp**, Prof. Steve Luck, UCD Center for Mind & Brain (2018)

Participant. **Interdisciplinary Kollege: Social Cognition**. Günne, Germany (2014)

B) MENTORING PROGRAMS

Mentor. **McMaster's Women in Science & Engineering (WiSE) Initiative** (2024 –)

Mentee. **Innovation and Entrepreneurship Faculty Group**, McMaster U. (2024-25)

Project Mentor. **Data Science Bootcamp**, Erdős Institute (2021)

Mentee. **Sign UP! Career-building Program for Post Docs**, Max-Planck-Gesellschaft, EAF Berlin (2021)

Mentee. **Women in Music Information Retrieval Mentoring Program** (mentor: Dr. Kat Agres) (2018)