Michael W. Weiss

Curriculum Vitae

Department of Psychology
University of Montreal
michael.weiss@umontreal.ca
647-861-1085
Citizenship: USA
Website: https://m-w-w.github.io

EDUCATION

2016	Ph.D., Department of Psychology, University of Toronto
2011	M.A., Department of Psychology, University of Toronto
2010	B.S. (dual), Department of Psychology, and Department of Ecology and Evolutionary Biology, University of Arizona

EMPLOYMENT

2016–present Postdoctoral fellow, International Laboratory for Brain, Music, and Sound Research

(BRAMS), University of Montreal

FUNDING AND AWARDS

2020–2021	Postdoctoral Research Scholarship (\$45,000): Fonds de Recherche du Québec, Nature et Technologies. (Ranked 1 st)
2018–2020	Postdoctoral Research Scholarship (\$90,000): <i>Fonds de Recherche du Québec, Nature et Technologies.</i> (Ranked 4 th)
2015	Best student paper: <i>Meeting of the Society for Music Perception and Cognition</i> , Nashville, TN.
2011–2014	Vanier Canada Graduate Scholarship (\$150,000): <i>Natural Sciences and Engineering Research Council of Canada</i> .
2010–2011	Auditory Cognitive Neuroscience "CREATE" Graduate Fellowship (\$17,000): <i>Natural Sciences and Engineering Research Council of Canada</i> . (Second year awarded but declined)
2012, 2014–2016	Various competitive research travel awards: Society for Education, Music, and Psychology Research; Society for Music Perception and Cognition; University of Toronto Mississauga; University of Toronto School of Graduate Studies.

PUBLICATIONS

- **Weiss, M. W.**, Sharda, M., Lense, M., Trehub, S. E., & Hyde, K. L. (2021). Enhanced memory for vocal melodies in Autism Spectrum Disorder and Williams syndrome. *Autism Research*. [early online access]
- **Weiss, M. W.**, Bissonnette, A.-M., & Peretz, I. (2020). The singing voice is special: Persistence of superior memory for vocal melodies despite vocal-motor distractions. *Cognition*. [early online access]
- Marion-St-Onge, C., **Weiss, M. W.**, Sharda, M., & Peretz, I. (2020). What makes musical prodigies? *Frontiers in Psychology*, *11*, Article 566373.
- **Weiss, M. W.,** Cirelli, L. K., McDermott, J. H., & Trehub, S. E. (2020). Development of consonance preferences in Western listeners. *Journal of Experimental Psychology: General*, 149, 634–649.
- **Weiss, M. W.,** Schellenberg, E. G., Peng, C., & Trehub, S. E. (2019). Contextual distinctiveness affects the memory advantage for vocal melodies. *Auditory Perception and Cognition*, *2*, 47–66.
- Schellenberg, G. S., **Weiss, M. W.**, Peng, C., & Alam, S. (2019). Fine-grained implicit memory for key and tempo. *Music and Science*, *2*, 1–14.
- Trehub, S. E., **Weiss, M. W.**, & Cirelli, L. K. (2019). Developmental perspectives on music. In J. Rentfrow & D. Levitin (Eds.), *Foundations of music psychology: Theory and research* (pp. 265–303). Cambridge, MA: MIT Press.
- **Weiss, M. W.**, & Peretz, I. (2019). Ability to process musical pitch is unrelated to the memory advantage for vocal music. *Brain and Cognition*, *129*, 35–39.
- Trehub, S. E., & **Weiss, M. W.** (2017). Music cognition: Developmental and multimodal perspectives. In R. Ashley & R. Timmins (Eds.), *Routledge companion to music cognition* (pp. 403–414). New York, NY: Routledge.
- Schellenberg, E. G., Poon, J., & **Weiss, M. W.** (2017). Memory for melody and key in childhood. *PLoS ONE*, 12: e0187115.
- **Weiss, M. W.**, Schellenberg, E. G., & Trehub, S. E. (2017). Generality of the memory advantage for vocal melodies. *Music Perception*, *34*, 313–318.
- **Weiss, M. W.**, Trehub, S. E., Schellenberg, E. G., & Habashi, P. (2016). Pupils dilate for vocal or familiar music. *Journal of Experimental Psychology: Human Perception and Performance*, 42, 1061–1065.
- **Weiss, M. W.**, Schellenberg, E. G., Trehub, S. E., & Dawber, E. J. (2015). Enhanced processing of vocal melodies in childhood. *Developmental Psychology*, *51*, 370–377.
- **Weiss, M. W.**, Vanzella, P., Schellenberg, E. G., & Trehub, S. E. (2015). Pianists exhibit enhanced memory for vocal melodies but not piano melodies. *Quarterly Journal of Experimental Psychology*, 68, 866–877.
- **Weiss, M. W.** & Bidelman, G. M. (2015). Listening to the brainstem: Musicianship enhances intelligibility of subcortical representations for speech. *Journal of Neuroscience*, *35*, 1687–1691.
- Bidelman, G. M., **Weiss, M. W.**, Moreno, S., & Alain, C. (2014). Coordinated plasticity in brainstem and auditory cortex contributes to enhanced categorical speech perception in musicians. *European Journal of Neuroscience*, *40*, 2662–2673.
- Schellenberg, E. G., & **Weiss, M. W.** (2013). Music and cognitive abilities. In D. Deutsch (Ed.), *The psychology of music* (3rd ed., pp. 499–550). Amsterdam: Elsevier.
- **Weiss, M. W.**, Trehub, S. E., & Schellenberg, E. G. (2012). Something in the way she sings: Enhanced memory for vocal melodies. *Psychological Science*, *23*, 1074–1078.

Weiss, M. W., & Schellenberg, E. G. (2011). Augmenting cognition with music. In I. Segev & H. Markram (Eds.), *Augmenting cognition* (pp. 103–125). Lausanne, Switzerland: EPFL Press.

INVITED TALKS

- **Weiss, M. W.** (2019, November). *Learning and memory for vocal music*. Invited talk, 3rd Symposium of the Graduate Program on Neuroscience and Cognition of the Universidade Federal do ABC, São Bernardo do Campo, Brazil.
- **Weiss, M. W.** (2019, November). *What makes musical prodigies so special?* Invited talk, 3rd Symposium of the Graduate Program on Neuroscience and Cognition of the Universidade Federal do ABC, São Bernardo do Campo, Brazil.
- **Weiss, M. W.** (2018, March). *A memory advantage for vocal melodies*. Invited talk at Zatorre Lab, McGill University, Montreal, Canada.

CONFERENCE PRESENTATIONS

- **Weiss, M. W.**, Peretz, I. (2019, November). *Sung improvisation as a new tool for revealing implicit tonal knowledge in congenital amusia*. Oral presentation, Auditory Perception, Cognition, and Action Meeting, Montreal, Canada.
- **Weiss, M. W.**, Peretz, I. (2019, August). *Learning and memory for tonal and atonal melodies in exceptional musicians*. Oral presentation, Society for Music Perception and Cognition, New York, NY.
- **Weiss, M. W.**, Peretz, I. (2019, August). *Enhanced memory for vocal music does not involve the motor system.* Oral presentation, Society for Music Perception and Cognition, New York, NY.
- **Weiss, M. W.**, Sharda, M., & Peretz, I. (2019, March). *Musical prodigies exhibit better atonal melody recall and greater sensorimotor brain connectivity than equally trained musicians*. Poster presentation, Cognitive Neuroscience Society, San Francisco, CA.
- **Weiss, M. W.**, Schellenberg, E. G., & Trehub, S. E. (2017, August). *Contextual distinctiveness affects the memory advantage for vocal melodies*. Oral presentation, Society for Music Perception and Cognition, San Diego, CA.
- Schellenberg, E. G., **Weiss, M. W.**, Peng, C. (2017, August). *How accurate is implicit memory for tempo?* Oral presentation, Society for Music Perception and Cognition, San Diego, CA.
- **Weiss, M. W.**, Cirelli, L. K., Trehub, S. E., & McDermott, J. H. (2017, August). *Consonance perception: Age and training effects.* Poster presentation, Society for Music Perception and Cognition, San Diego, CA.
- **Weiss, M. W.**, & Peretz, I. (2017, June). *Memory for vocal music in individuals with congenital amusia*. Poster presentation, Neurosciences and Music VI, Boston, MA.
- Marion-St-Onge, C., **Weiss, M. W.**, & Peretz, I. (2017, June). *Singing in teenagers with amusia*. Poster presentation, Neurosciences and Music VI, Boston, MA.
- **Weiss, M. W.**, Sharda, M., Trehub, S. E., & Hyde, K. (2017, June). *Children with ASD have enhanced memory for vocal music*. Poster presentation, Canadian Psychological Association, Toronto, ON.
- **Weiss, M. W.**, Schellenberg, E. G., & Trehub, S. E. (2016, July). *Generality of the memory advantage for vocal melodies*. Oral presentation, International Conference for Music Perception and Cognition, San Francisco, CA.

- Schellenberg, E. G., **Weiss, M. W.**, & Trehub, S. E. (2016, July). *Vocal melodies are remembered better than piano melodies but sine-wave simulations are not*. Oral presentation, International Conference for Music Perception and Cognition, San Francisco, CA.
- Schellenberg, E. G., & Weiss, M. W. (2016, July). *How accurate is implicit memory for the key of unfamiliar melodies?* Oral presentation, International Conference for Music Perception and Cognition, San Francisco, CA.
- Weiss, M. W., Trehub, S. E., & Schellenberg, E. G. (2016, July). Generality of the memory advantage for vocal melodies. Oral presentation, International Conference for Music Perception and Cognition, San Francisco, CA.
- **Weiss, M. W.**, Trehub, S. E., Schellenberg, E. G., & Habashi, P. (2015, August). *Eyes wide open for vocal melodies*. Oral presentation, Society for Music Perception and Cognition, Nashville, TN.
- **Weiss, M. W.**, Schellenberg, E. G., Trehub, S. E., Dawber, E. J. (2014, August). *Processing advantages for vocal melodies: Are children like adults?* Oral presentation, International Conference on Music Perception and Cognition, Seoul, South Korea.
- **Weiss, M. W.**, Vanzella, P., Schellenberg, E. G., Trehub, S. E. (2014, June). *Pianists remember vocal melodies better than piano melodies*. Poster presentation, Neurosciences and Music V, Dijon, France.
- Bidelman, G., **Weiss, M. W.**, Moreno, S., & Alain, C. (2013, August). *Musical training strengthens the subcortical-cortical encoding of and categorical perception of speech*. Poster presentation, Society for Music Perception and Cognition, Toronto, ON.
- **Weiss, M. W.**, & Trehub, S. E. (2013, January). *Detecting pitch errors in well-known songs*. Poster presentation, Auditory Cognitive Neuroscience Society, Tucson, AZ.
- **Weiss, M. W.**, Trehub, S. E., & Schellenberg, E. G. (2012, July). *Effect of timbre change on memory for melodies*. Poster presentation, International Conference on Music Perception and Cognition, Thessaloniki, Greece.
- **Weiss, M. W.**, Trehub, S. E., & Schellenberg, E. G. (2012, January). *Exploring the vocal advantage in memory for melodies*. Poster presentation, Auditory Cognitive Neuroscience Society, Tucson, AZ.
- **Weiss, M. W.**, Schellenberg, E. G., & Trehub, S. E. (2011, November). *Vocal timbre influences memory for melodies*. Oral presentation, Auditory Perception, Cognition, and Action Meeting, Seattle, WA.
- **Weiss, M.W.**, Hupbach, A., Gomez, R. & Nadel, L. (2010, May). *Effects of overtraining on updating of human episodic memory*. Poster presentation, Association for Psychological Science Annual Conference, Boston, MA.

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TEACHING EXPERIENCE

Music Cognition (McGill) Primary instructor (Winter, 2020)

Cognitive Development (UTM) Primary instructor (Summer, 2016)

TA (2012, 2013, 2015, 2016)

Music Perception and Cognition (UTM)

Lab section instructor (2012, 2014–2016)

Research Design and Analysis (UTM)

Lab section instructor (2014, 2015)

Human Communication (UTM) TA (2013, 2015, 2016)

Perception (UTM) TA (2014, 2015)
Human Memory (UTM) TA (2011, 2016)
Cognitive Psychology (UTM) TA (2011, 2014)

Developmental Psychology (UTM) TA (2010, 2013, 2014)

Introductory Psychology (UTM) TA (2010, 2011)

Singing analysis (workshop, São Paulo) Primary instructor (Fall, 2019)

Introduction to Matlab (workshop, UTM) Primary instructor (Spring, 2016)

Undergrad Research Student Statistics (workshop, UTM) Co-primary instructor (Fall, 2015)

RESEARCH MENTORSHIP

2019–2020	Anne-Marie Bissonnette (research assistant), Peretz Lab, University of Montreal (Co-authored one paper)
	Nicola Teolis (2-term research project), Peretz Lab, University of Montreal
2018–2019	Margot Charignon (research assistant), Peretz Lab, University of Montreal (Co-authored one paper)
	Kathya Carrier (summer research scholarship), Peretz Lab, University of Montreal
	Lucie-Maud Ménard (research assistant), Peretz Lab, University of Montreal
2016–2017	Madeleine Borgeat (research assistant), Peretz Lab, University of Montreal
2015–2016	Chen Peng (2-term research project), Schellenberg Lab, University of Toronto Mississauga (Co-authored two papers)
	Jamie Poon (2-term research project), Schellenberg Lab, University of Toronto Mississauga (Co-authored one paper)
2014–2015	Peter Habashi (2-term research project), Schellenberg Lab, University of Toronto Mississauga (Co-authored one paper)
2013–2014	Kirthika Venkatesan (2-term research project), Schellenberg Lab, University of Toronto Mississauga
	Zain Butt (2-term research project), Trehub Lab, University of Toronto Mississauga

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2013, summer Emily Dawber (summer research scholarship), Trehub Lab, University of Toronto

Mississauga (Co-authored one paper)

Nabeel Ahmed (summer research scholarship), Trehub Lab, University of Toronto

Mississauga

2012, summer Haley Kragness (summer research scholarship), Trehub Lab, University of Toronto

Mississauga

Bradley Marks, Trehub Lab (summer research scholarship), University of Toronto

Mississauga

PROFESSIONAL AND EXTRACURRICULAR ACTIVITY

Open-source code Custom plugins for jsPsych (github.com/m-w-w)

Open-source teaching materials Online demonstrations of experiments and analysis code

for instructors (https://m-w-w.github.io/demos)

Ad hoc reviewer Brain and Language, Frontiers in Psychology,

International Journal of Psychophysiology, Journal of

Experimental Child Psychology, Journal of

Experimental Psychology: LMC, Memory, Memory and Cognition, Music Perception, Music and Science,

Scientific Reports

Professional membership Society for Music Perception and Cognition (2010–

present)

Auditory Perception and Cognition Society (2011, 2019)

Science outreach University of Toronto campus coordinator for Let's Talk

Science (2012–2014)

Psychology Graduate Students Association,

University of Toronto

Co-president (2011–2012)

Vice president (2013–2014)

Social coordinator (2010–2011, 2014–2015)

Outreach coordinator (2012–2013)

Satellite campus representative (2012–2014)

Campus union representative (2013–2014)

Compositions Wispy Sweet Nuthins (solo album, 2016)

REFEREES

Isabelle Peretz, Professor University of Montreal, Department of Psychology CP 6128, succ. Centre-ville, Montreal, QC, Canada, H3C 3J7 514-343-5840, <u>isabelle.peretz@umontreal.ca</u>

E. Glenn Schellenberg, Professor Emeritus University of Toronto Mississauga, Department of Psychology 3359 Mississauga Road, Mississauga, ON, Canada, L5L 1C6 905-828-5367, g.schellenberg@utoronto.ca

Sandra E. Trehub, Professor Emeritus University of Toronto Mississauga, Department of Psychology 3359 Mississauga Road, Mississauga, ON, Canada, L5L 1C6 905-828-5415, sandra.trehub@utoronto.ca