

# 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, University of Montreal |
|--------------|--|

## PUBLICATIONS

- Weiss, M. W.,** Cirelli, L. K., McDermott, J. H., & Trehub, S. E. (2019). 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.

## FELLOWSHIPS, AWARDS, AND HONORS

- 2020–2021      Postdoctoral Research Scholarship (\$45,000): *Fonds de Recherche du Québec, Nature et Technologies*.
- 2018–2020      Postdoctoral Research Scholarship (\$90,000): *Fonds de Recherche du Québec, Nature et Technologies*.
- 2016              Research Travel Awards: *Society for Education, Music, and Psychology Research; University of Toronto Mississauga*.
- 2015              Best student paper: *Meeting of the Society for Music Perception and Cognition*, Nashville, TN.
- Research Travel Awards: *Society for Music Perception and Cognition; University of Toronto Mississauga*.
- 2014              Research Travel Awards: *Society for Education, Music, and Psychology Research; University of Toronto Mississauga*.
- 2012              Research Travel Awards: *Society for Education, Music, and Psychology Research; University of Toronto Mississauga; University of Toronto School of Graduate Studies*.
- 2011–2014      Vanier Canada Graduate Scholarship (\$150,000): *Natural Sciences and Engineering Research Council of Canada*.
- 2010–2011      Auditory Cognitive Neuroscience “CREATE” Graduate Fellowship (\$17,000): *Natural Sciences and Engineering Research Council of Canada*.

## INVITED TALKS

- Weiss, M. W.** (2019, November). *Learning and memory for vocal music*. Invited talk, 3<sup>rd</sup> 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, 3<sup>rd</sup> 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.

## 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)
Undergraduate Research Student Statistics (workshop) (UTM)	Co-instructor (Fall, 2015)

## RESEARCH MENTORSHIP

2019–2020	Anne-Marie Bissonnette (research assistant), Peretz Lab, University of Montreal  Nicola Teolis (honors student), Peretz Lab, University of Montreal
2018–2019	Margot Charignon (research assistant), Peretz Lab, University of Montreal  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
2013, summer	Emily Dawber* (summer research scholarship), Trehub Lab, University of Toronto Mississauga (visiting student from Queen's University) * Co-authored one paper  Nabeel Ahmed (summer research scholarship), Trehub Lab, University of Toronto Mississauga (visiting student from McMaster University)
2012, summer	Haley Kragness (summer research scholarship), Trehub Lab, University of Toronto Mississauga (visiting student from Penn State University)  Bradley Marks, Trehub Lab (summer research scholarship), University of Toronto Mississauga

**PROFESSIONAL AND EXTRACURRICULAR ACTIVITY**

Ad hoc reviewer	<i>Brain and Language</i> <i>International Journal of Psychophysiology</i> <i>Journal of Experimental Child Psychology</i> <i>Journal of Experimental Psychology: LMC</i> <i>Memory</i> <i>Music Perception</i> <i>Music and Science</i> <i>Scientific Reports</i> <i>Frontiers in Psychology</i>
Professional membership	Society for Music Perception and Cognition (2010–present)
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	<i>Wispy Sweet Nuthins</i> (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  
[isabelle.peretz@umontreal.ca](mailto:isabelle.peretz@umontreal.ca)

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](mailto: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](mailto:sandra.trehub@utoronto.ca)