

# Stephen C. Van Hedger

Huron University  
Department of Psychology  
London, ON Canada

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<https://haplab.ca>

## PROFESSIONAL EXPERIENCE

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<b>Assistant Professor</b> <i>Department of Psychology</i> <i>Huron University</i>	2020 - Present
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<b>Member</b> <i>Centre for Brain and Mind</i> <i>Western Institute for Neuroscience</i> <i>University of Western Ontario</i>	2020 - Present
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<b>Postdoctoral Fellow</b> <i>Brain and Mind Institute</i> <i>Department of Psychology</i> <i>University of Western Ontario</i> <i>Advisors: Ingrid S. Johnsrude, Laura J. Batterink</i>	2018 - 2020
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<b>Postdoctoral Scholar</b> <i>Chicago Center for Practical Wisdom</i> <i>Department of Psychology</i> <i>University of Chicago</i> <i>Advisors: Howard C. Nusbaum, Marc G. Berman</i>	2015 - 2018
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## EDUCATION

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<b>Ph.D., Psychology, University of Chicago</b> <i>Advisor: Howard C. Nusbaum</i>	2015
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<b>A.M., Psychology, University of Chicago</b> <i>Advisor: Howard C. Nusbaum</i>	2012
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<b>A.B., Music, University of Chicago</b> General and Departmental Honors Phi Beta Kappa Honor Society	2009
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## GRANT SUPPORT

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**SSHRC Insight Discovery Grant**

2024 - 2026

*External*

Project Title: Borderlands between Speech and Music: The Development, Validation, and Initial Testing of a Musical Speech Corpus

Role: Principal Investigator

Amount: \$61,681 CAD

**Notre Dame Research (NDR) Grant**

2023 - 2026

*Internal (University of Notre Dame)*

Project Title: The Bittersweet Spot: How Musical Emotions Affect the Understanding of Life Events

Role: Co-Investigator (PI: Dr. Berthold Hoeckner)

Amount: \$100,000 USD

**SSHRC Institutional Grant (SIG)**

2023 - 2024

*Internal (Huron University)*

Project Title: Demystifying Perfect Pitch through Citizen Science

Role: Principal Investigator

Amount: \$6,400 CAD

**Huron Technology Support Fund**

2022 - 2023

*Internal (Huron University)*

Project Title: Developing a “Citizen Science” Website for Perfect Pitch

Role: Principal Investigator

Amount: \$2,312 CAD

**CIHR Project Grant**

2022 - 2027

*External*

Project Title: The Cognitive Neuroscience of Listening Effort

Role: Co-Investigator (PIs: Dr. Bjorn Herrmann, Dr. Ingrid Johnsrude, Dr. Susan Scollie)

Amount: \$742,050 CAD

**BrainsCAN Registered Report Fund**

2021 - 2022

*Internal (University of Western Ontario)*

Project Title: Characterizing Listening Effort in the Understanding of Noisy Speech

Role: Principal Investigator

Amount: \$7,400 CAD

**SSHRC Institutional Grant (SIG)**

2020 - 2021

*Internal (University of Western Ontario)*

Project Title: Auditory category learning, memory, and generalization

Role: Co-Investigator (PI: Ingrid Johnsrude)

Amount: \$7,000 CAD

**Targeted Research Fund**

2020 - 2021

*Internal (Huron University)*Project Title: Engagement with Nature and Well-Being in the Age of COVID-19Role: Principal InvestigatorAmount: \$4,100 CAD**Division of Social Sciences Research Grant**

2014 - 2015

*Internal (University of Chicago)*Project Title: Neural correlates of absolute pitch categorizationRole: Principal InvestigatorAmount: \$11,800 USD**Arts-Science Graduate Collaboration Grant**

2010 - 2011

*Internal (University of Chicago)*Project Title: The role of vibrotactile feedback in music performanceRole: Principal Investigator (Co-PIs: Jonathan De Souza, Shannon Heald)Amount: \$1,500 USD**FELLOWSHIPS AND AWARDS**

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**BrainsCAN Tier I Postdoctoral Fellowship Award**

2018 - 2020

*University of Western Ontario*

\$70,000 CAD/year

**Western Cognitive Neuroscience Postdoctoral Fund**

2018 - 2020

*University of Western Ontario**Brain and Mind Institute*

\$50,000 CAD/year

**John Dewey Prize Lectureship**

2015

*University of Chicago**Department of Psychology*

\$5,000 USD

**Starkey Duncan Award for Excellence in Undergraduate Teaching**

2014

*University of Chicago**Department of Psychology***Norman H. Anderson Research Fellow**

2011 - 2015

*University of Chicago**Department of Psychology***Fulbright Program Finalist**

2009 - 2010

*United States Department of State*

## PUBLICATIONS

Google Scholar Metrics (as of September 4, 2024)

Citations: 820

h-index: 16

i10-index: 25

Peer-Reviewed Articles

- [1] Bongiovanni, N., Chan, T.M.V., **Van Hedger, S.C.**, Findley, C., & Hoeckner, B. (In Press). Pitch height and mode have asymmetrical effects on the perception of mixed emotions in major and minor seventh chords. *Psychology of Aesthetics, Creativity, and the Arts*.  
<https://doi.org/10.1037/aca0000705>
- [2] Mathiesen, S.L., **Van Hedger, S.C.**, Irsik, V.C., Bain, M.M., Johnsrude, I.S., & Herrmann, B. (2024). Exploring age differences in absorption and enjoyment during story listening. *Psychology International*, 6, 667-684. <https://doi.org/10.3390/psycholint6020041>
- [3] **Van Hedger, S.C.**, Halpern, A.R., Vollweiler, D.J., Smith, E.E., & Pfordresher, P.Q. (2024). Is *Hey Jude* in the right key? Cognitive components of absolute pitch memory. *Memory & Cognition*. Advance Online Publication: <https://doi.org/10.3758/s13421-024-01530-x>
- [4] Hull, K., Van Hedger, K., & **Van Hedger, S.C.** (2024). Absorption relates to individual differences in visual face pareidolia. *Current Psychology*, 43, 4458-4474.  
<https://doi.org/10.1007/s12144-023-04670-6>
- [5] Sweet, S., **Van Hedger, S.C.**, & Batterink, L.J. (2024). Of words and whistles: Statistical learning operates similarly for identical sounds perceived as speech and non-speech. *Cognition*, 242, 105649. <https://doi.org/10.1016/j.cognition.2023.105649>
- [6] **Van Hedger, S.C.**, Bongiovanni, N., & Khudhair, H. (2023). Some like it sharp: Song familiarity influences musical preference for absolute tuning. *Psychology of Aesthetics, Creativity, and the Arts*. Advance online publication. <https://doi.org/10.1037/aca0000636>
- [7] **Van Hedger, S. C.**, & Bongiovanni, N. (2023). Widespread but limited in context: Absolute tuning judgments are disrupted by relative pitch cues. *Music & Science*, 6,  
<https://doi.org/10.1177/20592043231208626>
- [8] Schertz, K.E., Kotabe, H.P., Meidenbauer, K.L., Layden, E.A., Zhen, J., Bowman, J.E., Lakhtakia, T., Lyu, M., Paraschos, O.A., Janey, E.A., Samtani, A.L., Stier, A.J., Gehrke, K., **Van Hedger, S.C.**, Vohs, K.D., & Berman, M.G. (2023). Nature's path to thinking about others and the surrounding environment. *Journal of Environmental Psychology*, 89, 102046.  
<https://doi.org/10.1016/j.jenvp.2023.102046>
- [9] **Van Hedger, S.C.**, Bongiovanni, N., Heald, S.L.M., & Nusbaum, H.C. (2023). Absolute pitch judgments of familiar melodies generalize across timbre and octave. *Memory & Cognition*, 51, 1898-1910. <https://doi.org/10.3758/s13421-023-01429-z>
- [10] Bongiovanni, N., Heald, S.L.M., Nusbaum, H.C., & **Van Hedger, S.C.** (2023). Generalizing across tonal context, timbre, and octave in rapid absolute pitch training. *Attention, Perception, & Psychophysics*, 85, 525-542. <https://doi.org/10.3758/s13414-023-02653-0>

- [11] Alexander, E., **Van Hedger, S.C.**, & Batterink, L.J. (2023). Learning words without trying: Daily second language podcasts support word-form learning in adults. *Psychonomic Bulletin & Review*, 30, 751-762. <https://doi.org/10.3758/s13423-022-02190-1>
- [12] Schertz, K.E., Bowman, J.E., Kotabe, H.P., Layden, E.A., Zhen, J., Lakhtakia, T., Lyu, M., Paraschos, O.A., **Van Hedger, S.C.**, Rim, N.K., Vohs, K.D., & Berman, M.G. (2022). Environmental influences on affect and cognition: A study of natural and commercial semi-public spaces. *Journal of Environmental Psychology*, 101852, <https://doi.org/10.1016/j.jenvp.2022.101852>
- [13] Brancato, G., Van Hedger, K., Berman, M.G., & **Van Hedger, S.C.** (2022). Simulated nature walks improve psychological well-being along a natural to urban continuum. *Journal of Environmental Psychology*, 101779, <https://doi.org/10.1016/j.jenvp.2022.101779>
- [14] Dumas, T.M., Ellis, W.E., **Van Hedger, S.C.**, Litt, D.M., & MacDonald, M. (2022). Lockdown, bottoms up? Changes in adolescent substance use across the COVID-19 pandemic. *Addictive Behaviours*, 131, 107326. <https://doi.org/10.1016/j.addbeh.2022.107326>
- [15] Heald, S.L.M., **Van Hedger, S.C.**, Veillette, J., Reis, K., Snyder, J.S., & Nusbaum, H.C. (2022). Going beyond rote auditory learning: Neural patterns of generalized auditory learning. *Journal of Cognitive Neuroscience*, 34, [https://doi.org/10.1162/jocn\\_a\\_01805](https://doi.org/10.1162/jocn_a_01805)
- [16] **Van Hedger, S.C.**, Johnsrude, I.S., & Batterink, L.J. (2022). Musical instrument familiarity affects statistical learning of tone sequences. *Cognition*, 218, 104949. <https://doi.org/10.1016/j.cognition.2021.104949>
- [17] Reis, K.S., Heald, S.L.M., Veillette, J.P., **Van Hedger, S.C.**, & Nusbaum, H.C. (2021). Individual differences in human frequency-following response predict pitch labeling ability. *Scientific Reports*, 11, 14290, <https://doi.org/10.1038/s41598-021-93312-7>
- [18] **Van Hedger, S.C.**, Veillette, J.P., Heald, S.L.M., & Nusbaum, H.C. (2020). Revisiting continuous versus discrete models of human behavior: The case of absolute pitch. *PLoS One*, <https://doi.org/10.1371/journal.pone.0244308>
- [19] Uddin, S., Reis, K., **Van Hedger, S.C.**, Heald, S.L.M., & Nusbaum, H.C. (2020). Cortical mechanisms of talker normalization in fluent sentences. *Brain & Language*, 201, 104722. <https://doi.org/10.1016/j.bandl.2019.104722>
- [20] **Van Hedger, S.C.**, Heald, S.L.M., & Nusbaum, H.C. (2019). Absolute pitch can be learned by some adults. *PLoS One*, <https://doi.org/10.1371/journal.pone.0223047>
- [21] Zhen, A., **Van Hedger, S.C.**, Heald, S.L.M., Goldin-Meadow, S., & Tian, X. (2019). Manual directional gestures facilitate cross-modal perceptual learning. *Cognition*, 187, 178-187. <https://doi.org/10.1016/j.cognition.2019.03.004>
- [22] **Van Hedger, S.C.**, Nusbaum, H.C., Clohisey, L., Jaeggi, S.M., Buschkuhl, M., & Berman, M.G. (2019). Of cricket chirps and car horns: The effect of nature sounds on cognitive performance. *Psychonomic Bulletin & Review*, 26, 522-530. <https://doi.org/10.3758/s13423-018-1539-1>

- [23] **Van Hedger, S.C.**, Nusbaum, H.C., Heald, S.L.M., Huang, A., Kotabe, H., & Berman, M.G. (2019). The aesthetic preference for nature sounds depends on sound object recognition. *Cognitive Science*, 43, e12734. <https://doi.org/10.1111/cogs.12734>
- [24] Stenfors, C., **Van Hedger, S.C.** ... Berman, M.G. (2019). Positive effects of nature on cognitive performance across multiple experiments: Test order but not affect modulates the cognitive effects. *Frontiers in Psychology*, 10:1413. <https://doi.org/10.3389/fpsyg.2019.01413>
- [25] **Van Hedger, S.C.**, & Nusbaum, H.C. (2018). Individual differences in absolute pitch performance: Contributions of working memory, musical expertise, and tonal language background. *Acta Psychologica*, 191, 251-260. <https://doi.org/10.1016/j.actpsy.2018.10.007>
- [26] **Van Hedger, S.C.**, Heald, S.L.M., Uddin, S., & Nusbaum, H.C. (2018). A note by any other name: Intonation context rapidly influences absolute note judgments. *Journal of Experimental Psychology: Human Perception & Performance*, 44, 1268-1282. <https://doi.org/10.1037/xhp0000536>
- [27] Uddin, S., Heald, S.L.M., **Van Hedger, S.C.**, & Nusbaum, H.C. (2018). Hearing sounds as words: Neural responses to environmental sounds in the context of fluent speech. *Brain & Language*, 179, 51-61. <https://doi.org/10.1016/j.bandl.2018.02.004>
- [28] Nusbaum, H.C., Uddin, S., **Van Hedger, S.C.**, & Heald, S.L.M. (2018). Consolidating skill learning through sleep. *Current Opinion in Behavioral Sciences*, 20, 174-182. <https://doi.org/10.1016/j.cobeha.2018.01.013>
- [29] Uddin, S., Heald, S.L.M., **Van Hedger, S.C.**, Klos, S., & Nusbaum, H.C. (2018). Understanding environmental sounds in sentence context. *Cognition*, 172, 134-143. <https://doi.org/10.1016/j.cognition.2017.12.009>
- [30] **Van Hedger, S.C.**, Heald, S.L.M., & Nusbaum, H.C. (2018). Long-term pitch memory for music recordings is related to auditory working memory precision. *The Quarterly Journal of Experimental Psychology*, 71, 879-891. <https://doi.org/10.1080/17470218.2017.1307427>
- [31] **Van Hedger, S.C.**, Heald, S.L.M., Huang, A., Rutstein, B., & Nusbaum, H.C. (2017). Telling in-tune from out-of-tune: Widespread evidence for implicit absolute intonation. *Psychonomic Bulletin & Review*, 24, 481-488. <https://doi.org/10.3758/s13423-016-1099-1>
- [32] Heald, S.L.M., **Van Hedger, S.C.**, & Nusbaum, H.C. (2017). Perceptual plasticity for auditory object recognition. *Frontiers in Psychology*, 8, 781. <https://doi.org/10.3389/fpsyg.2017.00781>
- [33] **Van Hedger, S.C.**, Heald, S.L.M., & Nusbaum, H.C. (2016). What the [bleep]? Enhanced absolute pitch memory for a 1000 Hz sine tone. *Cognition*, 154, 139-150. <https://doi.org/10.1016/j.cognition.2016.06.001>
- [34] **Van Hedger, S.C.**, Heald, S.L.M., & Nusbaum, H.C. (2015). The effects of acoustic variability on absolute pitch categorization: Evidence of contextual tuning. *Journal of the Acoustical Society of America*, 138(1), 436-446. <https://doi.org/10.1121/1.4922952>
- [35] **Van Hedger, S.C.**, Heald, S.L.M., Koch, R., & Nusbaum, H.C. (2015). Auditory working memory predicts individual differences in absolute pitch learning. *Cognition*, 140, 95-110. <https://doi.org/10.1016/j.cognition.2015.03.012>

- [36] **Van Hedger, S.C.**, Palmer, C., Hogstrom, A., & Nusbaum, H.C. (2015). Sleep consolidation of musical competence. *Music Perception*, 33(2), 163-178.  
<https://doi.org/10.1525/mp.2015.33.2.163>
- [37] Heald, S.L.M., **Van Hedger, S.C.**, & Nusbaum, H.C. (2014). Auditory category knowledge in experts and novices. *Frontiers in Neuroscience*, 8, 260.  
<https://doi.org/10.3389/fnins.2014.00260>
- [38] **Hedger, S.C.**, Nusbaum, H.C., Lescop, O., Wallisch, P., & Hoeckner, B. (2013). Music can elicit a visual motion aftereffect. *Attention, Perception, & Psychophysics*, 75(5), 1039-1047.  
<https://doi.org/10.3758/s13414-013-0443-z>
- [39] **Hedger, S.C.**, Heald, S.L.M., & Nusbaum, H.C. (2013). Absolute pitch may not be so absolute. *Psychological Science*, 24(8), 1496-1502. <https://doi.org/10.1177/0956797612473310>
- [40] **Hedger, S. C.**, Nusbaum, H.C., & Hoeckner, B. (2013). Conveying movement in music and prosody. *PLoS One*, 8(10), e76744. <https://doi.org/10.1371/journal.pone.0076744>

### Preprints

- [1] **Van Hedger, S.C.**, Jovanovic, K., Grenier, A., & Hoh, S.Y. (2024). Short-term pitch memory predicts both incidentally and intentionally acquired absolute pitch categories. *PsyArXiv*, <https://doi.org/10.31234/osf.io/k37ym>
- [2] Ahmed, H., Van Hedger, K., Berman, M.G., & **Van Hedger, S.C.** (2024). Degraded nature sounds are liked less but still restorative. *PsyArXiv*, <https://doi.org/10.31234/osf.io/knvy8>
- [3] Whiteford, K.L., Baltzell, L.S., Chiu, M., Cooper, J.K., Faucher, S., Goh, P.Y., Hagedorn, A., Irsik, V.C., Irvine, A., Lim, S.J., Mesik, J.L., Mesquita, B., Oakes, B., Rajappa, N., Roverud, E., Schrlau, A.E., **Van Hedger, S.C.**, Bharadwaj, H.M., Johnsrude, I.S., Kidd Jr., G. Luebke, A.E., Maddox, R.K., Marvin, E.W., Perrachione, T.K., Shinn-Cunningham, B.G., & Oxenham, A.J. (2024). Musical training does not enhance neural sound encoding at early stages of the auditory system: A large-scale multisite investigation. *bioRxiv*, <https://doi.org/10.1101/2024.09.02.610856>
- [4] Babalola, O., Van Hedger, K., & **Van Hedger, S.C.** (2024). Misophonia is associated with heightened emotion evocation by music. *PsyArXiv*, <https://doi.org/10.31234/osf.io/jzydf>
- [5] Thomson, J. S. H., & **Van Hedger, S. C.** (2023). Effects of a brief online mindfulness intervention on cognition and affect in university students: A randomized longitudinal design. *PsyArXiv*, <https://doi.org/10.31234/osf.io/zwbhe>
- [6] Cormier, H., Tsang, C.D., & **Van Hedger, S.C.** (2023). The role of attention in inducing a musically induced visual motion aftereffect. *PsyArXiv*, <https://doi.org/10.31234/osf.io/vh9n6>
- [7] **Van Hedger, S.C.**, Winspear, M., & Batterink, L.J. (2021). Talker variability facilitates the statistical learning of speech sounds. *PsyArXiv*, <https://doi.org/10.31234/osf.io/t8eyh>

**Book Chapters and Encyclopedia Entries**

- [1] **Van Hedger, S.C., & Maheshwari, U.** (In Press). Music and Language in the Brain: Balancing Domain-Specific and Domain-General Mechanisms. In E. Andrews (Ed.) *Cambridge Handbook of Language and Brain*. Cambridge University Press.
- [2] **Van Hedger, S.C., & Johnsrude, I.S.** (2022). Speech perception under adverse listening conditions. In A. Popper, A. Coffin (Eds.), *Springer Handbook of Auditory Research*. Springer, Cham. [https://doi.org/10.1007/978-3-030-81542-4\\_6](https://doi.org/10.1007/978-3-030-81542-4_6)
- [3] **Van Hedger, S.C., & Nusbaum, H.C.** (2018). Absolute pitch. In: J. Vonk, T. K. Shackelford (Eds.), *Encyclopedia of Animal Cognition and Behavior*. Springer, Cham.
- [4] **Heald, S.L.M., Van Hedger, S.C., & Nusbaum, H.C.** (2017). Understanding sound: Auditory skill acquisition. *Psychology of Learning and Motivation*, 67, 53-93.

**TEACHING EXPERIENCE****Current Courses, Huron University**

<b>PSYCHOL 1100E:</b> Method in General Psychology*	2020 - 2023
<b>PSYCHOL 2115A:</b> Introduction to Sensation and Perception	2020
<b>PSYCHOL 2130E:</b> Method in Sensation and Perception	2023
<b>PSYCHOL 2750E:</b> Theories and Methods of Cognitive Neuroscience	2021
<b>PSYCHOL 3131F**:</b> Music Cognition	2020, 2022, 2023
<b>PSYCHOL 3696G:</b> Dynamics of Mentorship in Psychology Research*	2023
<b>PSYCHOL 4880E:</b> Honors Thesis*	2020 - 2023

\* Team-taught course

\*\* Also taught under PSYCHOL 3760F/G

**Previous Courses**

<b>SOSC 14100:</b> Mind – I (University of Chicago)	2012+, 2013
<b>SOSC 14200:</b> Mind – II (University of Chicago)	2013+, 2014
<b>SOSC 14300:</b> Mind – III (University of Chicago)	2013+
<b>PSYC 20200:</b> Psychological Research Methods (University of Chicago)	2014+
<b>PSYC 20700:</b> Sensation and Perception (University of Chicago)	2014+
<b>PSYC 24860:</b> The Musical Mind (University of Chicago)	2015

+ Teaching Assistant

**Guest Lectures**

<b>PSYCHOL 4195F:</b> Special Topics in Cognitive Psychology (University of Western Ontario)	2021, 2022
Lecture Title: “Perceptual learning of absolute pitch in adulthood”	



<b>PSYCHOL 2115A:</b> Introduction to Sensation and Perception (University of Western Ontario) Lecture Title: "How does sleep influence perceptual processes?"	2019
<b>COMMSCI 4417A:</b> Introduction to Hearing Science (University of Western Ontario) Lecture Title: "Perceptual Organization of Music"	2018
<b>PSY 210:</b> Introduction to Psychological Science (Elmhurst College) Lecture Title: "Does this Taylor Swift sound sharp? Exploring pitch memory in the general population"	2014

## MENTORSHIP EXPERIENCE

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### Undergraduate Honors Thesis Advising

- [1] Carson Kiriakopoulos (2024-25)  
*Huron University*  
Title: TBD
- [2] Lauren Perry (2024-25)  
*Huron University*  
Title: TBD
- [3] Catherine Webster (2024-25)  
*Huron University*  
Title: TBD
- [4] Yujia Zhao (2024-25)  
*Huron University*  
Title: TBD
- [5] Ethan Axler (2023-24)  
*Huron University*  
Title: An investigation of the effects of suggestion in auditory memory: How much do humans really like the sound of our voice?
- [6] Omolewa Babalola (2023-24)  
*Huron University*  
Title: Understanding the relationship between misophonia and musical memory, emotion, and categorization
- [7] Morgan Clarke (2023-24)  
*Huron University*  
Title: Environmental narratives and psychological restoration: An immersive experience
- [8] Natalie Tong (2023-24)  
*Huron University*  
Title: The role of mindfulness in experiencing restoration from spoken narratives describing nature
- [9] Mark Dunlop (2022-23)  
*Huron University*  
Title: Effects of age, need for cognition, and cognitive fatigue on statistical learning
- [10] André Grenier (2022-23)  
*Huron University*  
Title: Assessing the effectiveness of different training paradigms in pitch categorization

- [11] Jordan Thomson (2022-23)  
*Huron University*  
Title: Effects of an auditory-based 15-minute daily online mindfulness intervention on cognitive processing, socio-affective functioning, and dispositional mindfulness
- [12] Evan Smith (2022-23)  
*Huron University*  
Title: Tonal working memory and singing ability relate to individual differences in long-term memory for musical pitch
- [13] Huda Ahmed (2021-2022)  
*Huron University*  
Title: The influence of sound quality on the restorative benefits of nature
- [14] Hannah Cormier (2020-2021)  
*Huron University*  
Title: The role of attention in inducing cross-modal aftereffects
- [15] Giuliana Brancato (2020-2021)  
*Huron University*  
Title: Virtual walks through nature and increased well-being
- [16] Amish Gaur (2020-2021)  
*University of Western Ontario*  
Title: The effects of degraded speech on long-term memory in individuals with mild-moderate sensorineural hearing loss
- [17] Mykayla Winspear (2019-2020)  
*University of Western Ontario*  
Title: The influence of talker variability on statistical learning
- [18] Mackenzie Bacon (2018-2019)  
*University of Western Ontario*  
Title: Memory for words and sentences: The effect of acoustical degradation
- [19] Luke Clohisy (2017-2018)  
*University of Chicago*  
Title: Memory for popular music: Evidence for widespread tempo abilities and implicit pitch categories
- [20] Max Bluestone (2015- 2016)  
*University of Chicago*  
Title: The effects of semantic and temporal congruency on memory for audiovisual clips
- [21] Anders Hogstrom (2012-2013)  
*University of Chicago*  
Title: The sound of silence: Attention entrainment to isochronous and syncopated beats

### **PhD Advising**

- [1] Joseph Rovetti (2023 - Present)  
*University of Western Ontario*  
Co-Supervised with Ingrid S. Johnsrude

### **Huron Auditory Perception (HAP) Lab Mentorship**

*Role: Principal Investigator*

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| [1] Ethan Axler (2021 - 2024)          | [12] Katherine Hull (2021 - 2022) *        |
| [2] Omolewa Babalola (2022 - 2024) * + | [13] Katarina Jovanovic (2023 - Present) * |
| [3] Noah Bongiovanni (2020 - 2024) *   | [14] Huda Khudhair (2021 - 2023) *         |
| [4] Alexa Bouchard (2023 - Present)    | [15] Noor El Madani (2024 - Present)       |
| [5] Georgia Bubel (2024- Present)      | [16] Monika Nguyen (2022 - 2024)           |

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| [6] Eden Brown (2023 – Present)               | [17] Irina Petrovic (2020 – 2022)     |
| [7] Amish Gaur (2020 – 2022)                  | [18] Evan Smith (2022 - Present) *    |
| [8] André Grenier (2022 - 2023) *             | [19] Jordan Thomson (2022 - 2023) * + |
| [9] Lucas Hardie (2023 - Present)             | [20] Natalie Tong (2022 - 2024)       |
| [10] Noah Hendricks-Polack (2024 – Present) + | [21] Michelle Tu (2021 – 2022)        |
| [11] Austyn (Sum Yee) Hoh (2023 - Present) *  | [22] Hebe Wong (2022 - 2023)          |

\* Co-author on preprint or peer-reviewed journal article

+ Centre for Undergraduate Research Learning (CURL) Fellowship Winner

### Additional Mentorship Experience

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| [1] | <b>Science Research Program Mentor</b><br><i>Fox Lane High School</i><br>Worked one-on-one with a high school student to develop a research project related to absolute pitch and tonal language experience. | 2023        |
| [2] | <b>Practicum Advisor, Master's Program in Computer Science</b><br><i>University of Chicago</i><br>Advised two master's students in the design and execution of psychophysical projects.                      | 2015 - 2016 |

## **PROFESSIONAL SERVICE**

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### Journal Reviewer

Current Directions in Psychological Science | Cortex | Communications Psychology | Proceedings of the National Academy of Sciences | Proceedings of the Royal Society B | Journal of Experimental Psychology: General | Neuropsychologia | OpenMind | Cognitive Science | eLife | Psychonomic Bulletin and Review | Attention, Perception, & Psychophysics | Behavior Research Methods | Brain and Language | Social Cognitive and Affective Neuroscience | Journal of Neurolinguistics | PLOS One | Royal Society Open Science | Memory | Scientific Reports | Frontiers in Neuroscience | Heliyon | Music Perception | Trends in Hearing | Acta Psychologica | Journal of Experimental Psychology: Learning, Memory, and Cognition | Annals of the New York Academy of Sciences | The Journal of the Acoustical Society of America | Applied Acoustics | Current Psychology | Collabra: Psychology | iScience | Brain Sciences | Biological Rhythm Research | Humanities & Social Sciences Communications | STEM Fellowship Journal | Liberated Arts

### Grant Reviewer

Israel Science Foundation (ISF)

### Editorial Experience

- |     |  |
|-----|--|
| [1] | Guest Editor: <i>Frontiers in Psychology</i><br>Topic: "Active Cognitive Processing for Auditory Perception" |
| [2] | Editorial Board Member: <i>STEM Fellowship Journal</i>   |

### Leadership Roles

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|-----|--|
| [1] | Member, Program Committee (2023-2024)<br>Biennial Conference of the Society for Music Perception and Cognition<br>Banff, Alberta, Canada |
|-----|--|

- [2] Member-At-Large (2021 – 2023)  
Executive Board of the Society for Music Perception and Cognition

## PROFESSIONAL ORGANIZATIONS

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The Society for Music Perception and Cognition | The Psychonomic Society | Association for Research in Otolaryngology | The Association for Psychological Science | The Acoustical Society of America | The American Psychological Association | Sigma Xi (Full Member)

## UNIVERSITY SERVICE

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### Departmental Service

- |     |   |                |
|-----|---|----------------|
| [1] | Coordinator, Psychology Course Research Credit System | 2023 - Present |
| [2] | Course Coordinator, PSYCHOL 1100E                     | 2022 - 2024    |

### Graduate Student Committee Work

- |     |   |                |
|-----|---|----------------|
| [1] | External Ph.D. Examiner (Jane Bairnsfather)<br><i>The University of Melbourne</i>                 | 2024           |
| [2] | M.Sc. Graduate Advisory Committee Member (Adam Cotton)<br><i>University of Western Ontario</i>    | 2023 - 2024    |
| [3] | External Ph.D. Examiner (Samuel Leak)<br><i>Cambridge University</i>                              | 2023           |
| [4] | Comprehensive Examiner (Cailey Salagovic)<br><i>University of Western Ontario</i>                 | 2023           |
| [5] | Ph.D. Graduate Advisory Committee Member (Bruno Mesquita)<br><i>University of Western Ontario</i> | 2022 - Present |
| [6] | University Examiner, M.Sc. Defense (Sarah Berger)<br><i>University of Western Ontario</i>         | 2022           |
| [7] | M.Sc. Graduate Advisory Committee Member (Bruno Mesquita)<br><i>University of Western Ontario</i> | 2020 - 2022    |
| [8] | University Examiner, Ph.D. Defense (Avital Sternin)<br><i>University of Western Ontario</i>       | 2021           |

### University Committee Work

- |     |   |                |
|-----|---|----------------|
| [1] | Member-At-Large, Huron Centre for Undergraduate Research Learning | 2024 – Present |
| [2] | Huron University Research Committee                               | 2021 – 2023    |
| [3] | Huron University Teaching and Learning Committee                  | 2021 - 2024    |
| [4] | University of Chicago Travel and Research Committee               | 2010 - 2014    |

### Speaking Engagements

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|-----|--|------|
| [1] | Panelist, “Huron's Unique Approach to Teaching & Experiential Learning”<br><i>Huron University</i>                             | 2024 |
| [2] | Spring Preview Day Mock Lecture<br><i>Huron University</i><br>Title: “What can perceptual illusions tell us about psychology?” | 2024 |

- [3] Panelist, HeadStart 2023 2023  
*Huron University*  
Topic: "How to apply to graduate school"
- [4] Scotiabank Scholars Sample Lecture 2022, 2023  
*Huron University*  
Title: "What makes a leader with heart? Insights from psychology"
- [5] Panelist, Spring Open House 2022  
*Huron University*  
Topic: "Where do you find community in a world of technology?"
- [6] Panelist, Centre for Undergraduate Research Learning Spring Conference 2022  
*Huron University*  
Topic: "Undergraduate research, mentorship, and collaboration"

#### Additional University Service

- [1] **Fulbright Scholarship Interviewer** 2012 - 2018  
*University of Chicago*  
Annually reviewed between 4-7 applications for Fulbright Scholarships and submit recommendations to the university.
- [2] **PRISM Psychology Graduate Student Preceptor** 2012 - 2014  
*University of Chicago*  
Planned approximately 7 events each academic year to help students become involved in research and explore post-graduation opportunities.
- [3] **Council on Advanced Studies Workshop Coordinator** 2011 - 2012  
*University of Chicago*  
Organized biweekly presentations of music perception research given by graduate students, faculty, and external speakers.

#### SELECTED CONFERENCE TALKS

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- [1] **Van Hedger, S.C., & Grénier, A.\*** (2024). Assessing the Efficacy of a Gamified Approach to Training Absolute Pitch Categories. *Biennial Meeting of the Society for Music Perception and Cognition*, Banff, AB.
- [2] **Van Hedger, S.C., Bongiovanni, N., Heald, S.L.M., & Nusbaum, H.C.** (2023). Absolute pitch judgments of familiar melodies generalize across timbre and octave. *Midwest Cognitive Science Conference*, Grand Rapids, MI.
- [3] **Van Hedger, S.C., & Johnsrude, I.S.** (2020). Understanding different forms of degraded speech as an auditory skill. *43rd Annual Midwinter Meeting of the Association for Research in Otolaryngology*, San Jose, CA
- [4] **Van Hedger, S.C., Heald, S.L.M., & Nusbaum, H.C.** (2019). Robust absolute pitch memory in the general population: Evidence from popular melodies. *Society for Music Perception and Cognition Conference*. New York University, New York, NY

- [5] **Van Hedger, S.C.**, Heald, S.L., Koch, R., Nusbaum, H.C. (2015). Auditory working memory predicts individual differences in absolute pitch learning: Evidence from short- and long-term training. *Society for Music Perception and Cognition Conference*. Vanderbilt University, Nashville, TN
- [6] **Van Hedger, S.C.**, Heald, S.L., Nusbaum, H.C. (2015). Incidental absolute pitch learning in an interactive multi-modal environment. *Acoustical Society of America 170<sup>th</sup> Meeting*. Jacksonville, FL
- [7] **Hedger, S.C.**, Heald, S.L., Nusbaum, H.C. (2013). Absolute pitch may not be so absolute. *Society for Music Perception and Cognition Conference*. Ryerson University, Toronto, ON
- [8] **Hedger, S.C.**, Klos, S., Nusbaum, H.C. (2013). Individual differences in the short- and long-term training of musical pitch. *Midwest Music Cognition Symposium*. The Ohio State University, Columbus, OH
- [9] **Hedger, S.C.**, Hoeckner, B., Nusbaum, H.C. (2011). Music Can Convey Movement like Prosody in Speech. *Society for Music Perception and Cognition Conference*. Eastman School of Music, Rochester, NY
- [10] **Hedger, S.C.**, Heald, S.L., DeSouza, J., Hoeckner, B., Nusbaum, H.C. (2011). The Role of Vibrotactile Input in Musical Performance. *Franke Institute for the Humanities*. The University of Chicago, Chicago, IL
- [11] **Hedger, S.C.**, Hoeckner, B., Nusbaum, H.C. (2011). The Sound of Motion in Music. *Midwest Cognitive Science Meeting*. Michigan State University, East Lansing, MI

## SELECTED POSTER PRESENTATIONS

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- [1] Hoh, S.\*, Jovanovic, K.\*, & **Van Hedger, S.C.** (2024). Short-Term Pitch Memory Explains Variance in Both Incidental and Explicit Absolute Pitch Representations. *Biennial Meeting of the Society for Music Perception and Cognition*, Banff, AB.
- [2] **Van Hedger, S.C.**, Halpern, A.R., Vollweiler, D.J., Smith, E.\*, & Pfordresher, P.Q. (2023). Is *Hey Jude* in the right key? Cognitive and sensorimotor components of absolute pitch memory. *Annual Meeting of the Psychonomic Society*, San Francisco, CA.
- [3] Bongiovanni, N.\*, Heald, S.L.M., Nusbaum, H.C., & **Van Hedger, S.C.** (2023). Generalizing across tonal context, timbre, and octave in rapid absolute pitch training. *Midwest Cognitive Science Conference*, Grand Rapids, MI.
- [4] **Van Hedger, S.C.**, & Batterink, L.J. (2022). Talker variability influences the statistical learning of speech. *Annual Meeting of the Psychonomic Society*, Boston, MA
- [5] **Van Hedger, S.C.**, & Khudhair, H.\* (2021). Does tuning influence aesthetic judgments of music? Investigating the generalizability of absolute intonation ability. *Annual Meeting of the Psychonomic Society*, (virtual)

- [6] Cormier, H.\*, Tsang, C.D., & **Van Hedger, S.C.**, (2021). Musical scales can elicit visual motion aftereffects outside of the scope of attention. *Auditory Perception, Cognition, and Action Meeting*. (virtual)
- [7] **Van Hedger, S.C.**, Johnsrude, I.S., & Batterink, L.J. (2020). Prior real-world experience influences non-linguistic statistical learning. *Annual Meeting of the Psychonomic Society*, Austin, TX (virtual)
- [8] **Van Hedger, S.C.**, Heald, S.L.M., Nusbaum, H.C., Batterink, L.J., Davis, M.H., & Johnsrude, I.S. (2019). Learning different forms of degraded speech as a cognitive skill. *Annual Meeting of the Psychonomic Society*, Montreal, QC
- [9] **Van Hedger, S.C.**, Heald, S.L.M., & Nusbaum, H.C. (2019). Neural bases of note normalization in absolute pitch. *13<sup>th</sup> Annual Canadian Neuroscience Meeting*, Toronto, ON
- [10] **Van Hedger, S.C.**, & Nusbaum, H.C. (2019). Individual differences in absolute pitch performance: Contributions of working memory, musical expertise, and tonal language background. *42<sup>nd</sup> Annual Midwinter Meeting of the Association for Research in Otolaryngology*, Baltimore, MD
- [11] **Van Hedger, S.C.**, & Nusbaum, H.C. (2018). Individual differences in absolute pitch performance: Contributions of working memory, musical expertise, and tonal language background. *Annual Meeting of the Psychonomic Society*, New Orleans, LA
- [12] **Van Hedger, S.C.**, Heald, S.L.M., Huang, A., Rutstein, B., & Nusbaum, H.C. (2016). Telling in-tune from out-of-tune: Widespread evidence for implicit absolute intonation. *Annual Meeting of the Psychonomic Society*, Boston, MA
- [13] **Van Hedger, S.C.**, Heald, S.L., Wu, S., & Nusbaum, H.C. (2015). Judging the absolute pitch of novel recordings of familiar songs. *Annual Meeting of the Psychonomic Society*, Chicago, IL
- [14] **Van Hedger, S.C.**, Heald, S.L., Nusbaum, H.C. (2015). The effects of acoustic variability on absolute pitch categorization: Evidence for contextual tuning. *Acoustical Society of America 170<sup>th</sup> Meeting*. Jacksonville, FL
- [15] **Hedger, S.C.**, Nusbaum, H.C., Lescop, O., Wallisch, P., Hoeckner, B. (2013). Music can elicit a visual motion aftereffect: Evidence from behavior and fMRI. *Auditory Cognitive Neuroscience Society Meeting*, Tucson, AZ
- [16] **Hedger, S.C.**, Heald, S.L., Nusbaum, H.C. (2012). Absolute pitch may not be so absolute. *Annual Meeting of the Psychonomic Society*, Minneapolis, MN
- [17] **Hedger, S.C.**, Nusbaum, H.C., Lescop, O., Wallisch, P., Hoeckner, B. (2012). Music can elicit a visual motion aftereffect. *Association for Psychological Science Convention*, Chicago, IL
- [18] **Hedger, S.C.**, Palmer, C., Hogstrom, A., Nusbaum, H.C. (2012). The effects of sleep-dependent consolidation on motoric and abstract learning in music. *Midwest Cognitive Science Meeting*. Indiana University, Bloomington, IN

\* Trainee

## WORKSHOPS

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- [1]       **HAP Lab Public Workshops** (*Huron University*)  
Title: "Getting Started with jsPsych"  
Video tutorial series, publicly available on YouTube
  
- [2]       **BrainsCAN Computational Core Methods Lunch** (*University of Western Ontario*)  
Title: "An introduction to running web-based experiments using PsychoPy, jsPsych, and Pavlovia"  
Co-Presenter: J. Paul Minda
  
- [3]       **Nissl Lab Group** (*University of Western Ontario*)  
Title: "Best practices in conducting auditory experiments over the web"

## INVITED TALKS

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- [1]       **Van Hedger, S.C.** (2024). Exploring the nature of pitch representations in the general population. *Charity Chords Melodic Minds Speaker Series*. University of Western Ontario. London, ON
  
- [2]       **Van Hedger, S.C.** (2023). Absolute pitch memory in adulthood. *Charity Chords Melodic Minds Speaker Series*. University of Western Ontario. London, ON
  
- [3]       **Van Hedger, S.C.** (2021). Memory for absolute pitch in the general population. *Eastman/Rochester/Cornell/Buffalo Music Cognition Symposium*. Eastman School of Music. Rochester, NY
  
- [4]       **Van Hedger, S.C.** (2020). Perceptual understanding in a variable world: Insights from music and speech. Huron University. London, ON
  
- [5]       **Van Hedger, S.C.** (2020). What can pop songs tell us about representations of musical pitch? *Graduate Student Colloquium*. University of Western Ontario. London, ON
  
- [6]       **Van Hedger, S.C.** (2019). Absolute pitch can be trained in some high-auditory working memory adults. *The 5<sup>th</sup> Learning and Plasticity (LaP) Meeting*. Äkäslompola, Finland
  
- [7]       **Van Hedger, S.C.** (2016). Pitch memory in adulthood: Individual differences, generalizations, and abstractions. *Musical Learning across the Lifespan Workshop*. University of Western Ontario. London, ON
  
- [8]       **Van Hedger, S.C.** (2015). Telling sharp from flat: Pitch memory in the general population. DePauw University. Greencastle, IN
  
- [9]       **Van Hedger, S.C.** (2015). Developing a framework for musical understanding. The University of Chicago. Chicago, IL