Stephen C. Van Hedger

svanhedg@uwo.ca

2012

2009

Huron University

A.M., Psychology, University of Chicago

Advisor: Howard C. Nusbaum

A.B., Music, University of Chicago

General and Departmental Honors Phi Beta Kappa Honor Society

Department of Psychology +1 (519) 438-7224 x223 London, ON Canada https://haplab.ca PROFESSIONAL EXPERIENCE **Assistant Professor** 2020 - Present Department of Psychology Huron University Member 2020 - Present Centre for Brain and Mind Western Institute for Neuroscience University of Western Ontario Postdoctoral Fellow 2018 - 2020 Brain and Mind Institute Department of Psychology University of Western Ontario Advisors: Ingrid S. Johnsrude, Laura J. Batterink **Postdoctoral Scholar** 2015 - 2018 Chicago Center for Practical Wisdom Department of Psychology University of Chicago Advisors: Howard C. Nusbaum, Marc G. Berman **EDUCATION** Ph.D., Psychology, University of Chicago 2015 Advisor: Howard C. Nusbaum

GRANT SUPPORT

<u>Amount</u>: \$7,000 CAD

SSHRC Insight Discovery Grant External Discovery Grant	2024 - 2026
<u>Project Title</u> : Borderlands between Speech and Music: The Development, Validation, and Initial Testing of a Musical Speech Corpus <u>Role</u> : Principal Investigator <u>Amount</u> : \$61,681 CAD	
Notre Dame Research (NDR) Grant	2023 - 2026
Internal (University of Notre Dame) <u>Project Title</u> : 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) <u>Project Title</u> : Demystifying Perfect Pitch through Citizen Science	
Role: Principal Investigator	
<u>Amount</u> : \$6,400 CAD	
Huron Technology Support Fund	2022 - 2023
Internal (Huron University)	
<u>Project Title</u> : Developing a "Citizen Science" Website for Perfect Pitch <u>Role</u> : Principal Investigator	
Amount: \$2,312 CAD	
CIHR Project Grant	2022 - 2027
External	
<u>Project Title</u> : The Cognitive Neuroscience of Listening Effort <u>Role</u> : 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)	
<u>Project Title</u> : Characterizing Listening Effort in the Understanding of Noisy Speech <u>Role</u> : Principal Investigator	
Amount: \$7,400 CAD	
SSHRC Institutional Grant (SIG)	2020 - 2021
Internal (University of Western Ontario)	2020 2021
Project Title: Auditory category learning, memory, and generalization	
Role: Co-Investigator (PI: Ingrid Johnsrude)	

Stephen C. Van Hedger	C.V 3 of 17
Targeted Research Fund Internal (Huron University) Project Title: Engagement with Nature and Well-Being in the Age of COVID-19 Role: Principal Investigator Amount: \$4,100 CAD	2020 - 2021
Division of Social Sciences Research Grant Internal (University of Chicago) Project Title: Neural correlates of absolute pitch categorization Role: Principal Investigator Amount: \$11,800 USD	2014 - 2015
Arts-Science Graduate Collaboration Grant Internal (University of Chicago) Project Title: The role of vibrotactile feedback in music performance Role: Principal Investigator (Co-PIs: Jonathan De Souza, Shannon Heald) Amount: \$1,500 USD	2010 - 2011
FELLOWSHIPS AND AWARDS	
BrainsCAN Tier I Postdoctoral Fellowship Award University of Western Ontario \$70,000 CAD/year	2018 - 2020
University of Western Ontario	2018 - 2020 2018 - 2020
University of Western Ontario \$70,000 CAD/year Western Cognitive Neuroscience Postdoctoral Fund University of Western Ontario Brain and Mind Institute	
University of Western Ontario \$70,000 CAD/year Western Cognitive Neuroscience Postdoctoral Fund University of Western Ontario Brain and Mind Institute \$50,000 CAD/year John Dewey Prize Lectureship University of Chicago Department of Psychology	2018 - 2020
University of Western Ontario \$70,000 CAD/year Western Cognitive Neuroscience Postdoctoral Fund University of Western Ontario Brain and Mind Institute \$50,000 CAD/year John Dewey Prize Lectureship University of Chicago Department of Psychology \$5,000 USD Starkey Duncan Award for Excellence in Undergraduate Teaching University of Chicago	2018 - 2020 2015

PUBLICATIONS

Google Scholar Metrics (as of May 20, 2025) Citations: 1020 h-index: 17 i10-index: 28

Peer-Reviewed Articles

[1] Ahmed, H., Van Hedger, K., Berman, M.G., & Van Hedger, S.C. (2025). Using degraded sounds to examine the relationship between cognitive restoration and preference. *Journal of Environmental Psychology*, 104, 102608. https://doi.org/10.1016/j.jenvp.2025.102608

- [2] Henry, M., Obleser, J., Crusey, M., Fuller, E.R., Lee, Y.S., Meyer, M., Acosta, E.A.M., Van Hedger, S.C., Inbar, M., Oderbolz, C., Dunham, S.A., Anankul, Y., Sabo, L.E., Keitel, C., Maddox, R.K., Mehl, K., Aslan, G., Martens, P.A., Sauppe, S. ... Peelle, J. (2025). How strong is the rhythm of perception? A registered replication of Hickok, Farahbod, and Saberi (2015). *Royal Society Open Science*, 12, 220497. https://doi.org/10.1098/rsos.220497
- [3] Cormier, H., Tsang, C.D., & Van Hedger, S.C. (2025). The role of attention in inducing a musically induced visual motion aftereffect. *Attention, Perception, & Psychophysics, 87*, 480-497. https://doi.org/10.3758/s13414-024-02985-5
- [4] **Van Hedger, S.C.**, Jovanovic, K., Grenier, A., & Hoh, S.Y. (2025). Short-term pitch memory predicts both incidentally and intentionally acquired absolute pitch categories. *Memory & Cognition*. Advance online publication. https://doi.org/10.3758/s13421-025-01686-0
- [5] Babalola, O., Van Hedger, K. & **Van Hedger, S.C.** (2024). Misophonia is associated with heightened emotion evocation by music. *Current Psychology*, 43, 36294–36305. https://doi.org/10.1007/s12144-024-07050-w
- [6] Bongiovanni, N., Chan, T.M.V., **Van Hedger, S.C.,** Findley, C., & Hoeckner, B. (2024). 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*. Advance online publication. https://doi.org/10.1037/aca0000705
- [7] 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
- [8] 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*, 52, 1142-1151. https://doi.org/10.3758/s13421-024-01530-x
- [9] 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
- [10] 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

- [11] **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
- [12] **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
- [13] 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
- [14] **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
- [15] 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
- [16] 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
- [17] 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
- [18] 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
- [19] 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
- [20] 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
- [21] 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
- [22] 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

- [23] 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
- [24] 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
- [25] **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
- [26] 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
- [27] **Van Hedger, S.C.**, Nusbaum, H.C., Clohisy, L., Jaeggi, S.M., Buschkuehl, 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
- [28] **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
- [29] 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
- [30] **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
- [31] 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
- [32] 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
- [33] 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
- [34] 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
- [35] 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

- [36] 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
- [37] 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
- [38] 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
- [39] **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
- [40] 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
- [41] 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
- [42] 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
- [43] **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
- [44] **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
- [45] **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] Clarke, M., Tong, N., Van Hedger, K., & **Van Hedger, S.C.** (2025). Absorption facilitates nature-related restoration from spoken stories. *PsyArXiv*, https://doi.org/10.31234/osf.io/u79jr_v1
- [2] Zhao, Y. & **Van Hedger, S.C.** (2025). The effects of binaural beats on attention, reading comprehension, and mood. *PsyArXiv*, https://doi.org/10.31234/osf.io/jk27g_v1
- [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. ... 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] 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
- [5] **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
- [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

<u>Current Courses, Huron University</u>	
PSYCHOL 1100E: Method in General Psychology*	2020 - 2023
PSYCHOL 2115A: Introduction to Sensation and Perception	2020
PSYCHOL 2130E: Method in Sensation and Perception	2023
PSYCHOL 2750E : Theories and Methods of Cognitive Neuroscience	2021
PSYCHOL 2830A: Research in Psychology	2025
PSYCHOL 3131F**: Music Cognition	2020, 2022, 2023
PSYCHOL 3696G: Dynamics of Mentorship in Psychology Research*	2023
PSYCHOL 4880E: Honors Thesis*	2020 - 2023

^{*} Team-taught course

Previous Courses

SOSC 14100: Mind - I (University of Chicago)	2012+, 2013
SOSC 14200: Mind – II (University of Chicago)	2013+, 2014
SOSC 14300: Mind - III (University of Chicago)	2013+
PSYC 20200: Psychological Research Methods (University of Chicago)	2014+
PSYC 20700: Sensation and Perception (University of Chicago)	2014+

^{**} Also taught under PSYCHOL 3760F/G

PSYC 24860: The Musical Mind (University of Chicago)

2015

+ Teaching Assistant

Guest Lectures

PSYCHOL 4195F: Special Topics in Cognitive Psychology (University of Western Ontario)

Lecture Title: "Perceptual learning of absolute pitch in adulthood"

PSYCHOL 2115A: Introduction to Sensation and Perception (University of Western 2019

Ontario)

Lecture Title: "How does sleep influence perceptual processes?"

COMMSCI 4417A: Introduction to Hearing Science (University of Western Ontario) 2018

Lecture Title: "Perceptual Organization of Music"

PSY 210: Introduction to Psychological Science (Elmhurst College) 2014

Lecture Title: "Does this Taylor Swift sound sharp? Exploring pitch memory in the general population"

MENTORSHIP EXPERIENCE

Undergraduate Honors Thesis Advising

[1] <u>Carson Kiriakopoulos (2024-25)</u>

Huron University

Title: Musical mode perception

[2] <u>Lauren Perry (2024-25)</u>

Huron University

Title: Influence of alcohol and nonmedical drug use on absolute pitch perception

[3] <u>Yujia Zhao (2024-25)</u>

Huron University

Title: Effects of binaural beats on cognitive functions

[4] <u>Ethan Axler (2023-24)</u>

Huron University

Title: An investigation of the effects of suggestion in auditory memory: How much do humans really like the sound of our voice?

[5] Omolewa Babalola (2023-24)

Huron University

Title: Understanding the relationship between misophonia and musical memory, emotion, and categorization

[6] Morgan Clarke (2023-24)

Huron University

Title: Environmental narratives and psychological restoration: An immersive experience

[7] <u>Natalie Tong (2023-24)</u>

Huron University

Title: The role of mindfulness in experiencing restoration from spoken narratives describing nature

[8] Mark Dunlop (2022-23)

Huron University

Title: Effects of age, need for cognition, and cognitive fatigue on statistical learning

[9] <u>André Grenier (2022-23)</u>

Huron University

Title: Assessing the effectiveness of different training paradigms in pitch categorization

[10] <u>Jordan Thomson (2022-23)</u>

Huron University

Title: Effects of an auditory-based 15-minute daily online mindfulness intervention on cognitive processing, socio-affective functioning, and dispositional mindfulness

[11] Evan Smith (2022-23)

Huron University

Title: Tonal working memory and singing ability relate to individual differences in long-term memory for musical pitch

[12] <u>Huda Ahmed (2021-2022)</u>

Huron University

Title: The influence of sound quality on the restorative benefits of nature

[13] <u>Hannah Cormier (2020-2021)</u>

Huron University

Title: The role of attention in inducing cross-modal aftereffects

[14] Giuliana Brancato (2020-2021)

Huron University

Title: Virtual walks through nature and increased well-being

[15] 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

[16] Mykayla Winspear (2019-2020)

University of Western Ontario

Title: The influence of talker variability on statistical learning

[17] <u>Mackenzie Bacon (2018-2019)</u>

University of Western Ontario

Title: Memory for words and sentences: The effect of acoustical degradation

[18] Luke Clohisy (2017-2018)

University of Chicago

Title: Memory for popular music: Evidence for widespread tempo abilities and implicit pitch categories

[19] Max Bluestone (2015- 2016)

University of Chicago

Title: The effects of semantic and temporal congruency on memory for audiovisual clips

[20] 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

[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)
[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

Additional Mentorship Experience

[1] Science Research Program Mentor

2023

Fox Lane High School

Worked one-on-one with a high school student to develop a research project related to absolute pitch and tonal language experience.

[2] Practicum Advisor, Master's Program in Computer Science

2015 - 2016

University of Chicago

Advised two master's students in the design and execution of psychophysical projects.

PROFESSIONAL SERVICE

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 | Youth & Society | Cities & Health | OpenMind | Cognitive Science | eLife | Psychonomic Bulletin & Review | Attention, Perception, & Psychophysics | Behavior Research Methods | Brain and Language | Social Cognitive and Affective Neuroscience | Symmetry | Journal of Neurolinguistics | PLOS One | Royal Society Open Science | Memory | Scientific Reports | Frontiers in Neuroscience | Heliyon | Experimental Psychology | Music Perception | Psychology of Music | 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: Frontiers in Psychology
Topic: "Active Cognitive Processing for Auditory Perception"

⁺ Centre for Undergraduate Research Learning (CURL) Fellowship Winner

[2] Editorial Board Member: STEM Fellowship Journal

Leadership Roles

[1] Member, Program Committee (2023-2024)

Biennial Conference of the Society for Music Perception and Cognition

Banff, Alberta, Canada

[2] Member-At-Large (2021 – 2023)

Executive Board of the Society for Music Perception and Cognition

PROFESSIONAL ORGANIZATIONS

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

Departmental Service					
[1]	Coordinator, Psychology Course Research Credit System	2023 - Present			
[2]	Course Coordinator, PSYCHOL 1100E	2022 - 2024			
Gradua	te Student Committee Work				
[1]	External Ph.D. Examiner (Jane Bairnsfather)	2024			
	The University of Melbourne				
[2]	M.Sc. Graduate Advisory Committee Member (Adam Cotton)	2023 - 2024			
	University of Western Ontario				
[3]	External Ph.D. Examiner (Samuel Leak)	2023			
	Cambridge University				
[4]	Comprehensive Examiner (Cailey Salagovic)	2023			
	University of Western Ontario				
[5]	Ph.D. Graduate Advisory Committee Member (Bruno Mesquita)	2022 - Present			
	University of Western Ontario				
[6]	University Examiner, M.Sc. Defense (Sarah Berger)	2022			
	University of Western Ontario				
[7]	M.Sc. Graduate Advisory Committee Member (Bruno Mesquita)	2020 - 2022			
	University of Western Ontario				
[8]	University Examiner, Ph.D. Defense (Avital Sternin)	2021			
	University of Western Ontario				
Univer	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					
[1]	Panelist, "Excelling in the Classroom: Tips from Your Future Professors" Huron University	2025			

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

- [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* 170th *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

- [1] Babalola, O., Van Hedger, K., & Van Hedger, S.C. (2024). Misophonia is associated with heightened emotion evocation by music. *Annual Meeting of the Psychonomic Society*, New York, NY.
- [2] 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.
- [3] **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.

- [4] 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.
- [5] **Van Hedger, S.C.**, & Batterink, L.J. (2022). Talker variability influences the statistical learning of speech. *Annual Meeting of the Psychonomic Society*, Boston, MA
- [6] 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)
- [7] 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)
- [8] 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)
- [9] **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
- [10] **Van Hedger, S.C.,** Heald, S.L.M., & Nusbaum, H.C. (2019). Neural bases of note normalization in absolute pitch. 13th Annual Canadian Neuroscience Meeting, Toronto, ON
- [11] **Van Hedger, S.C.**, & Nusbaum, H.C. (2019). Individual differences in absolute pitch performance: Contributions of working memory, musical expertise, and tonal language background. 42nd Annual Midwinter Meeting of the Association for Research in Otolaryngology, Baltimore, MD
- [12] 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
- [13] 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
- [14] 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
- [15] **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* 170th Meeting. Jacksonville, FL
- [16] **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

- [17] **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
- [18] **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
- [19] **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

WORKSHOPS

- [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

- [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 5th Learning and Plasticity (LaP) Meeting*. Äkäslompolo, Finland

^{*} Trainee

- [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