

# Jessica A. Grahn

Brain and Mind Institute  
Department of Psychology  
Western Interdisciplinary Research Building, 5<sup>th</sup> Floor  
University of Western Ontario  
London, Ontario, CANADA

E-mail: [jgrahn@uwo.ca](mailto:jgrahn@uwo.ca)  
Phone: +1 519-661-2111, ext. 84804  
Website: [www.jessicagrahn.com](http://www.jessicagrahn.com)  
Nationality: USA, UK

## EMPLOYMENT

**Associate Professor**, Brain and Mind Institute AND Psychology Department, University of Western Ontario 2015 -  
**Assistant Professor**, Brain and Mind Institute AND Psychology Department, University of Western Ontario 2011 - 2015  
**Investigator Scientist**, Medical Research Council Cognition & Brain Sciences Unit, Cambridge, UK 2007 - 2010  
**Associate Lecturer** in Biological Psychology, Open University, UK (part-time) 2005 - 2010  
**Research Fellow (Stipendiary)** Clare Hall/Medical Research Council, UK 2004 - 2007

## CONSULTING

**SYNC**. Advisor to Boston-based start-up, SYNC, on development of a smartphone app for music and health, including a large-scale study on music and gait (www.syncproject.co) 2015 - pres  
**Neurosense, Ltd.** Analysis and report of brain imaging data, graphics production for corporations and advertising agencies. Resulting reports and images used by the Science Museum (London), Viacom, MTV, Johnson & Johnson, GMTV, Metro newspaper, among others. 2005 - 2010  
**Celestia, Ltd.** Website programming for database of clinical trial research 2004 - 2005

## EDUCATION

**PhD**, Wolfson College, University of Cambridge 2001 - 2005  
*Behavioural and Functional Imaging Studies of Rhythm Processing*  
Supervised by Matthew Brett and Bob Carlyon  
MRC Cognition and Brain Sciences Unit, Cambridge, UK  
PhD coursework at University of Illinois in Urbana-Champaign, USA 1999 - 2000  
**BA (Neuroscience)**, Northwestern University, Chicago, USA 1995 - 1999  
**BMus (Piano Performance)**, Northwestern University, Chicago, USA

## HONOURS & AWARDS

**Fellow**, Association for Psychological Science 2017  
**Faculty Scholar Award**, University of Western Ontario 2016 - 2018  
**\$14,000**  
**Understanding Human Cognition Scholar Award**, James S. McDonnell Foundation 2015 - 2021  
*Moving to the beat: The relationship between rhythm perception and movement*  
**\$600,000 USD**  
**New Investigator Award**, Canadian Institute of Health Research: *Investigating the Effects of Sound on Movement* **\$300,000** 2015 - 2020

<b>Early Researcher Award</b> , Ministry of Research and Innovation, <i>Brain Mechanisms of Musical Rhythm Processing</i> <b>\$140,000</b>	2012 - 2017
<b>Charles Darwin Award in Public Communication of Science</b> , British Science Association	2010
Organization for Human Brain Mapping Travel Award <b>\$750</b>	2007
Fellowship, Summer Institute in Cognitive Neuroscience: all expenses/tuition	2004
<b>Overseas Research Student Award</b>	2001 - 2004
<b>Honorable mention</b> : NSF predoctoral fellowship competition	1999
<b>Silver medal</b> , American Forensics League tournament, Impromptu speaking	1996
 <b>GRANTS</b>	
CPSR Catalyst Grant [Co-Investigator with Principal Applicant Patterson], <i>Feasibility of rhythm perception and production training in people with stroke</i> , <b>\$49,987</b>	2017 - 2018
NSERC-CREATE Grant [Co-PI], <i>Complex Dynamics in Brain and Behaviour</i> , <b>\$1,650,000</b>	2017 - 2023
NSERC Discovery Grant & Accelerator Supplement [PI], <i>Mechanisms of Rhythm Perception</i> , <b>\$375,000</b>	2016 - 2021
SSHRC Insight Development Grant [Co-Applicant], <i>Optimizing Music Learning: The Effects of Contextual Interference</i> , <b>\$74,296</b>	2016 - 2018
LIVELab seed grant [Co-Investigator with Co-Principal Investigators Cameron and Henry] <i>The role of social context in intersubject synchronization between audience members during musical performances</i> <b>\$11,400</b>	2015
CIHR-Collaborative Health Research Project Grant [Co-Principal Applicant with Patterson, Chen, Depaul] <i>The relationship of temporal gait asymmetry and rhythm perception and production</i> <b>\$450,200</b>	2015 - 2018
Operating Grant Priority Announcement, Canadian Institutes of Health Research and Parkinson Society Canada [PI], <i>Investigating Sound and Movement</i> <b>\$100,000</b>	2014 - 2016
Parkinson Society Pilot Grant, <i>Individual differences in response to auditory cues in Parkinson's disease</i> <b>\$44,987</b>	2014 - 2015
NSERC Research Tools and Instruments Grant [Co-Investigator with Owen, Fogel, Cusack, Morton, & McRae], <i>Simultaneous and synchronized electroencephalography (EEG) and functional magnetic resonance imaging (fMRI) during sleep in normal and brain injured populations</i> <b>\$145,503</b>	2014 - 2015
Western Strategic Support for CIHR Success, <i>Individual differences in response to auditory cues in Parkinson's disease</i> <b>\$22,500</b>	2013 - 2014
GRAMMY Foundation Research Grant[PI], <i>Brain Responses to Music in Human and Nonhuman Animals</i> <b>\$19,500 USD</b>	2012 - 2014
J.P. Bickell Foundation Medical Research Program[PI], <i>Optimizing effects of music on movement in Parkinson's disease</i> <b>\$65,000</b>	2012 - 2013
Leaders Opportunity Fund, Canadian Foundation for Innovation <b>\$112,000</b>	2012 - 2017
Ontario Research Fund <b>\$112,000</b>	2012 - 2017
Natural Sciences & Engineering Research Council, Discovery Grant [PI], <i>Individual Differences and Auditory-Motor Interactions in Rhythm Perception</i> , <b>\$120,000</b>	2011 - 2016
R.K. MacDonald Fund for Parkinson's Research, <i>Research into Parkinson's Disease</i> <b>\$40,000</b>	2011 - 2015
GRAMMY Foundation Research Grant, <b>\$20,300</b> [Co-Investigator with D. McAuley]	2007 - 2009
Brain Travel Grants: <b>£700, £600, £550</b>	2004/05/07
Wolfson Travel Fund <b>£150</b> , Lane Cox Fund <b>£100</b>	2004

## FELLOWSHIPS/SCHOLARSHIPS

<b>Research Fellowship</b> Clare Hall, University of Cambridge	2007 - 2010
<b>Betty Behrens Stipendiary Research Fellowship</b> Clare Hall, University of Cambridge (full salary and research/equipment/travel award)	2004 - 2007
<b>Gates Cambridge Scholarship</b> (awarded to ~1% of applicants)	2001 - 2004
<b>Overseas Research Scholarship</b> (international student PhD tuition support)	2001 - 2004
<b>Predoctoral Fellowship</b> , U of Illinois, Urbana-Champaign (Full support)	1999 - 2000
<b>Laura Winkelman Merit Scholarship</b> (Part tuition support)	1997 - 1999
<b>National Merit Scholar</b>	1995 - 1999

## TEACHING EXPERIENCE

<b>Cognitive Neuroscience of Music</b> (Undergraduate .5 year course), UWO	2011/12/14/16
<b>Scientific Writing</b> , (Graduate .5 year course), UWO	2015
<b>Neuroimaging Methods</b> , Interdisciplinary College (IK), Gunne, Germany	2012, 2013
<b>Faculty Member</b> , Graduate Program in Neuroscience, UWO	2011 -
<b>Associate Lecturer</b> in Biological Psychology (Distance course), Open University, UK	2005 - 2010
<b>External Examiner, Guest Lecturer</b> , Natural Sciences Tripos, part II Neuroscience, University of Cambridge	2008 - 2010
<b>Faculty mentor</b> , Open University, UK (mentor for new lecturers)	2007 - 2010
<b>Guest Lecturer</b> , (neuroanatomy lecture) Graduate Seminar skills seminar series	2007 - 2010
<b>Guest Lecturer</b> , Graduate Seminar series, MRC CBU, Cambridge	2005 - 2010
<b>External Examiner</b> , Music Tripos, part II, University of Cambridge	2005 - 2010
<b>Project Supervisor</b> , Music Tripos, part II, University of Cambridge	2008
<b>Supervisor</b> , University of Cambridge, Exp Psych undergraduate supervisions	2002 - 2004
<b>Graduate Record Examination (GRE) Educator</b> , Princeton Review, Chicago	1999 - 2000
<b>Tutor</b> , Northwestern University, Calculus, Biology, and Psychology	1995 - 1999
<b>Private music teacher</b> , Piano, Cello, Music Theory	1992 - 1999

## PUBLICATIONS

- L. McKetton, D. Purcell, V. Stone, **J.A. Grahn**, C. Bergevin, No otoacoustic evidence for a peripheral basis of absolute pitch. (2018) *Hearing Research*, doi: 10.1016/j.heares.2018.08.001.
- K.K. Patterson, J. Wong, S. Knorr, **J.A. Grahn**. Rhythm perception and production abilities and their relationship to gait after stroke (2018) *Archives of Physical Medicine and Rehabilitation*, 95: 945-51
- D. Levitin, **J.A. Grahn**, J. London. The Psychology of Music: Rhythm and Movement (2018) *Annual Reviews in Psychology*, 69: 51-75. doi.org/10.1146/annurev-psych-122216-011740
- F.L. Boucher\*, J.A. Burgoyne, D. Odijk, H. Honing, **J.A. Grahn**. What makes a Rhythm Complex? The Influence of Musical Training and Accent Type on Beat Perception. (2018) *PLoS ONE*. doi.org/10.1371/journal.pone.0190322
- L.-A. Leow\*, K. Waclawik\*, **J.A. Grahn**. The role of attention and intention in synchronization to music: effects on gait, (2017) *Experimental Brain Research* doi.org/10.1007/s00221-017-5110-5
- T. Nguyen\*, **J.A. Grahn**, Mind your music: The effects of music-induced mood and arousal across different memory tasks. (2017) *Psychomusicology: Music, Mind, and Brain*, 27(2), 81-94.

- M.J. Henry\*, B. Herrmann, **J.A. Grahn**, What can we learn about beat perception by comparing brain signals and stimulus envelopes? (2017) *PLoS ONE*, 12(2):e0172454
- D.L. Kogutek\*, J.D. Holmes, **J.A. Grahn**, S.G. Lutz, E. Ready\*, Active Music Therapy and Physical Improvements from Rehabilitation for Neurological Conditions. (2016) *Advances in Mind-Body Medicine*, 30(4):14-22.
- C.E. Carter\*, **J.A. Grahn**, Optimizing music learning: Exploring how blocked and interleaved practice schedules affect advanced performance (2016) *Frontiers in Psychology* 7:1251
- E.S. Nichols\*, **J.A. Grahn**, Neural correlates of audiovisual integration in music reading. (2016) *Neuropsychologia*, 91:199-210
- D.J. Cameron\*, K.A. Pickett, G.M. Earhart, **J.A. Grahn**, The effect of dopaminergic medication on beat-based auditory timing in Parkinson's disease. (2016) *Frontiers in Neurology*, 7:19  
doi: 10.3389/fneur.2016.00019
- A. Corbett, A.M. Owen, A. Hampshire, **J.A. Grahn**, R. Stenton, S. Dajani, A. Burns, R. Howard, N. Williams, C. Ballard, The effect of an online training package on cognition in healthy adults over 50: an online randomised controlled trial. (2015) *JAMDA Journal of the American Medical Directors Association*, 16(11) 990-7. doi:10.1016/j.jamda.2015.06.014
- J.D. Holmes, L.K. Brigham, M.E. Jenkins, E.A. Ready\*, S.G. Lutz, A.M. Johnson, **J.A. Grahn**, The effects of manipulating spatial location of visual cue placement on gait among individuals with Parkinson's Disease: A pilot study. (2015) *Physical and Occupational Therapy in Geriatrics*, 33: 263-278. doi: 10.3109/02703181.2015.1045109
- D.J. Cameron\*, **J.A. Grahn**, Cross-Cultural Influences on Rhythm Processing: Reproduction, Discrimination, and Beat Tapping. (2015), *Frontiers in Auditory Cognitive Neuroscience*, 6:366.  
doi: 10.3389/fpsyg.2015.00366
- H. Merchant, **J.A. Grahn**, L.J. Trainor, M. Rohrmeier, W.T. Fitch. Finding the beat: a neural perspective across human and non-human primates. (2015) *Philosophical Transactions of the Royal Society B*, 370: 20140093 doi: 10.1098/rstb.2014.0093
- S. Reaves, B. Graham, **J. A. Grahn**, P. Rabannifard, A. Duarte, Turn off the music! Music impairs visual associative memory performance in older adults (2015) *The Gerontologist*, doi: 10.1093/geront/gnu113
- L.-A. Leow\*, V.-R. Rinchon\*, **J.A. Grahn**. Familiar music increases walking speed in rhythmic auditory cueing. (2015) *Annals of the New York Academy of Sciences*, 1337:53-61,  
doi: 10.1111/nyas.12658
- D.J. Cameron\*, **J.A. Grahn**. Enhanced temporal production abilities in percussionists generalize beyond entrainment and musical plausibility. (2014) *Frontiers in Human Neuroscience*, 8:1003.  
doi: 10.3389/fnhum.2014.01003
- L.-A. Leow\*, T. Parrott\*, **J. A. Grahn**. Individual differences in beat perception affect gait responses to low- and high-groove music. (2014) *Frontiers in Human Neuroscience*, 8:811. doi: 10.3389/fnhum.2014.00811
- D.J. Cameron\*, **J.A. Grahn**. Neuroscientific investigations of musical rhythm. (2014) *Acoustics Australia*, 42(2), 111 - 116

- A.J. Hall, T.A. Brown, **J.A. Grahn**, J.S. Gati, P.L. Nixon, S.M. Hughes, S.M. Ravi & S.G. Lomber. There's more than one way to scan a cat: Imaging cat auditory cortex with high-field fMRI using continuous or sparse sampling (2014) *Journal of Neuroscience Methods* 224: 96-106
- S.L. Watson\*, **J.A. Grahn**. Perspectives on rhythm processing in motor regions of the brain (2013), *Music Therapy Perspectives* 31(1): 25-30
- R. Woelfle\*, **J.A. Grahn**. Auditory and visual interhemispheric communication in musicians and non-musicians. (2013) *PLOS ONE*, 8(12), e84446. doi: 10.1371/journal.pone.0084446
- C. Nombela\*, L.E. Hughes, A.M. Owen, **J. A. Grahn**. Into the groove: can music influence Parkinson's disease? (2013), *Neuroscience and Behavioural Reviews*, 37(10), 2564-2570.
- S. Schweizer, **J.A. Grahn**, A. Hampshire, D. Mobbs, T. Dalgleish. Training the emotional brain: Improving affective control through emotional working memory training (2013), *Journal of Neuroscience*, 33(12):5301-11. doi: 10.1523/jneurosci.2593-12.2013
- M. Urner, M. Sarri, **J.A. Grahn**, T. Manly, G. Rees, K. Friston. The role of prestimulus activity in visual extinction, (2013) *Neuropsychologia*, 51:1630-1637 10.1016/j.neuropsychologia.2013.05.005
- C. Nombela\*, C.L. Rae, **J.A. Grahn**, R.A. Barker, A.M. Owen, J.B. Rowe. How often does music and rhythm improve patients' perception of motor symptoms in Parkinson's disease? (2013) *Journal of Neurology*, 260(5):1404-1405. doi:10.1007/s00415-013-6860-z
- J.A. Grahn**, D. Schuit\*. Individual differences in rhythmic abilities: behavioural and fMRI investigations (2012) *Psychmusicology: Music, Mind and Brain* 20:105-121
- J.A. Grahn**, T. Manly. Common neural recruitment across diverse sustained attention tasks. (2012) *PLOS ONE* 7(11): e49556. doi:10.1371/journal.pone.0049556
- J.A. Grahn**. See what I hear? Beat perception in auditory and visual rhythms. (2012) *Experimental Brain Research* 220(1):51-61
- J.A. Grahn**, J.B. Rowe. Finding and feeling the musical beat: Striatal dissociations between detection and prediction of regularity. (2012) *Cerebral Cortex* 23: 913-921 doi: 10.1093/cercor/bhs083
- J.A. Grahn**. Neural mechanisms of rhythm perception: Current findings and future perspectives (2012), *Topics in Cognitive Science*, 4, 585-606
- J.A. Grahn**, M. J. Henry\*, J.D. McAuley. fMRI investigation of cross-modal interactions in beat perception: Audition primes vision, but not vice versa (2011) *NeuroImage*, 54, 1231-1243 [3]
- A.M. Owen, A. Hampshire, **J.A. Grahn**, R. Stenton, S. Dajani, A.S. Burns, R.J. Howard, C. G. Ballard. Putting brain training to the test. (2010) *Nature*, 465, 775-778 [56]
- J.A. Grahn**, J.B. Rowe. Feeling the beat: premotor and striatal interactions in musicians and non-musicians during beat perception. (2009) *Journal of Neuroscience*, 29(23), 7540-7548
- J.A. Grahn**, J.D. ,McAuley. Neural bases of individual differences in beat sensitivity. (2009) *NeuroImage*, 47, 1894-1903
- J.A. Grahn**, J. Parkinson, A. M. Owen. The role of the basal ganglia in learning and memory: neuropsychological studies (2009) *Behavioural Brain Research*, 199(1), 53-60
- J.A. Grahn**, M. Brett. Impairment of beat-based rhythm discrimination in Parkinson's disease (2009) *Cortex* 45(1), 54-61
- J.A. Grahn**. The role of the basal ganglia in beat perception: neuroimaging and neuropsychological investigations. (2009) *Annals of the New York Academy of Sciences*, 1169, 35-45

- J.A. Grahn.** Neuroscientific investigations of musical rhythm: recent advances and future challenges. (2009) *Contemporary Music Review* 28(3), 251-277
- R.P. Carlyon, J.M. Deeks, Y. Shtyrov, **J.A. Grahn**, H.E. Gockel, O. Hauk, and F. Pulvermuller  
Changes in the perceived duration of a narrowband sound induced by a preceding stimulus. (2009) *Journal of Experimental Psychology: Human Perception & Performance*, 35(6):1898-1912.
- J.A. Grahn**, J. Parkinson, A. M. Owen. The cognitive functions of the caudate nucleus. (2008) *Progress in Neurobiology*, 86(3), 141-155
- J.A. Grahn**, M. Brett. Rhythm perception in motor areas of the brain. (2007) *Journal of Cognitive Neuroscience*, 19(5), 1-14
- J.A. Grahn**, A. M. Owen. Memory: Obstacle avoidance without visual cues. (2006) *Current Biology*, 16(7), R247-R249

#### *Submitted*

- A. Sternin\*, J.A. Grahn. Fine tuning cognitive assessment in the elderly: The benefits of an online test battery (submitted, *The Gerontologist*)
- A. Paas\*, **J.A. Grahn**. The influence of tonality on rhythm perception (under revision, *Music Perception*)
- A. Marti Marca\*, T. Nguyen\*, **J.A. Grahn**. Keep calm and pump up the jams: How musical mood and arousal affect visual attention. (under revision, *Music & Science*)
- M. McMahon\*, M.J. Henry\*, C. Loveday, **J.A. Grahn**, The effect of musical training and language on rhythm perception (under revision, *PLoS ONE*)
- J.A. Grahn**, D. Schuit\*. Comparisons between working memory systems for verbal and rhythmic stimuli (submitted, *Philosophical Transactions of the Royal Society B*)

#### *Commentary*

- J.A. Grahn**, Tuning the brain to musical delight, (2017) *Nature Human Behaviour*

#### *Book chapters*

- M.J. Henry\*, **J.A. Grahn**, Music, brain and movement: Time, beat and rhythm (2017) In: Routledge Companion to Music Cognition. Routledge
- K. Waclawik\*, S. Watson\*, **J.A. Grahn**, Musical synchronization, social interaction, and the brain (2016) In: Shared representations: Sensorimotor Foundations of Social Life. Cambridge University Press
- D.J. Cameron\*, **J.A. Grahn**, The Neuroscience of rhythm, (2015) In: Oxford Handbook of Music Psychology, 2nd Edition. Eds. Susan Hallam, Ian Cross, Michael Thaut. Oxford University Press
- L.-A. Leow\*, **J.A. Grahn**. Neural Mechanisms of Beat Perception: Present Findings and Future Directions (2014) In: Neurobiology of Interval Timing. Springer Press.
- J.A. Grahn**. Advances in neuroimaging techniques: implications for the shared syntactic integration resource hypothesis. (2012) In: *Language and Music as Cognitive Systems* (Rebuschat, P., Rohrmeier, M., Hawkins, J., & Cross, I., eds). Oxford: Oxford University Press

### Book reviews

**J.A. Grahn.** Review of Psychology of Music: From Sound to Significance (2011), *Empirical Musicology Review*, 6, 138-140.

### Encyclopaedia Entries

**J.A. Grahn,** H. Gupta\*, *Brain Waves*. In: Music in the Social and Behavioural Sciences (2014), New York, NY: SAGE Reference

**J.A. Grahn,** S. Winokur\*, *Converging Evidence*. In: Music in the Social and Behavioural Sciences (2014), New York, NY: SAGE Reference

**J.A. Grahn,** C. Rinchon\*, *Critical Period*. In: Music in the Social and Behavioural Sciences (2014), New York, NY: SAGE Reference

**J.A. Grahn,** S.D. Shaw\*, *Expertise*. In: Music in the Social and Behavioural Sciences (2014), New York, NY: SAGE Reference

**J.A. Grahn,** H. Gupta\*, *Imaging Techniques*. In: Music in the Social and Behavioural Sciences (2014), New York, NY: SAGE Reference

**J.A. Grahn,** S.L. Watson\*, P. Mehan\*, *Short-term Effects of Music Exposure*. In: Music in the Social and Behavioural Sciences (2014), New York, NY: SAGE Reference

**J.A. Grahn,** S.L. Watson\*, *Tactus and Pulse*. In: Music in the Social and Behavioural Sciences (2014), New York, NY: SAGE Reference

### Selected Conference Proceedings

S. Stober, A. Sternin, A.M. Owen, **J.A. Grahn** (2015) *Towards Music Imagery Information Retrieval: Introducing the OpenMIIR Dataset of EEG Recordings from Music Perception and Imagination*. In: Proceedings of the 16th International Society for Music Information Retrieval Conference (ISMIR'15)

S. Stober, D.J. Cameron, **J.A. Grahn**. *Using Convolutional Neural Networks to Recognize Rhythm Stimuli from Electroencephalography Recordings*. In: Advances in Neural Information Processing Systems 27 (NIPS'14), Pages 1449-1457, 2014.

S. Stober; D.J. Cameron, **J.A. Grahn**. *Does the Beat go on? — Identifying Rhythms from Brain Waves Recorded after Their Auditory Presentation*. In: Proceedings of the 9th Audio Mostly: A Conference on Interaction With Sound (AM'14), Pages 23:1-23:8, 2014.

S. Stober; D.J. Cameron, **J.A. Grahn**. *Classifying EEG Recordings of Rhythm Perception*. In: 15th International Society for Music Information Retrieval Conference (ISMIR'14), Pages 649-654, 2014.

**J.A. Grahn,** D. Schuit. *Beat perception vs chunking in auditory short-term memory*. (2012). Proceedings of the 12<sup>th</sup> International Conference on Music Perception & Cognition, Thessaloniki, Greece.

**J.A. Grahn,** D. Schuit (2010) *Individual differences in rhythmic abilities: behavioural and fMRI studies*. Proceedings of the 11<sup>th</sup> International Conference on Music Perception & Cognition, Seattle, Washington.

**J.A. Grahn, J.B. Rowe.** (2008) *Beat initiation versus continued beat perception: The role of motor areas in the brain.* Proceedings of the 10<sup>th</sup> International Conference on Music Perception & Cognition, Sapporo, Japan.

*Selected Conference Presentations*

- D.J. Cameron, L. Prado, **J.A. Grahn**, & H. Merchant. (2017). *Comparing human and nonhuman primate brain responses to auditory sequences using EEG.* Society for Neuroscience, Washington, D.C., USA.
- M.J. Henry & **J.A. Grahn** (2015) *Metrical structure makes discriminating pitch (and intensity) targets more difficult.* BRAMS: The Next 10 Years, Montreal, QB
- D.J. Cameron, V. Wu, U. Azhar, **J.A. Grahn** (2015) *Motor system excitability increases before the beat in auditory rhythms.* Society for Neuroscience Meeting, Chicago, IL
- M.J. Henry, **J.A. Grahn** (2015) *Metrical structure makes discriminating pitch (and intensity) targets more difficult.* Society for Neuroscience Meeting, Chicago, IL
- L.A., Leow, C. Rinchon, **J.A. Grahn** (2015) *The Role of Motor Areas in Beat-Based and Non-Beat Based Timing.* Society for Neuroscience Meeting, Chicago, IL
- S. Stober, A. Sternin, A.M. Owen, **J.A. Grahn** (2015) *Similarity and Feature Learning for EEG Recordings of Music Perception and Imagination. (Best Paper Award)* Cognitively Based Music Informatics Research (CogMIR) 2015
- C. Carter, **J.A. Grahn** (2015) *Making practice stick: Exploring interleaved practice schedules as an alternative to blocked repetition,* International Symposium international LTM21 / AEM21, Montreal, Canada
- T. Nguyen, **J.A. Grahn** (2015) *Free-walking and synchronized Rhythmic Auditory Stimulation: Effects of individual differences in beat perception, dance and music training on gait.* Society for Music Perception and Cognition (SMPC), Nashville, TN, USA, August, 2015.
- A. Sternin, S. Stober, **J.A. Grahn** (2015) *Classifying perception and imagination of music from EEG.* Society for Music Perception and Cognition (SMPC), Nashville, TN, USA, August, 2015.
- L. McGarry, **J.A. Grahn** (2015) *Factors contributing to long-term memory for song lyrics.* Society for Music Perception and Cognition (SMPC), Nashville, TN, USA, August, 2015.
- A. Gibbings, D. Cruse, B. Stojanowski, **J.A. Grahn** (2015) *Attention and presence of a beat modulate neural entrainment to non-repeating rhythms.* 15<sup>th</sup> Rhythm Perception and Production Workshop (RPPW), Amsterdam, Netherlands, July, 2015.
- F. Bouwer, **J.A. Grahn** (2015) *The influence of attention on beat perception in rhythms with different accents and varying complexity: an fMRI study.* Rhythm Production and Perception Workshop 2015, Amsterdam, Netherlands
- D. Cameron, **J.A. Grahn** (2015) *The influence of culture on rhythm perception, behaviour, and neural entrainment to the beat.* Rhythm Production and Perception Workshop 2015, Amsterdam, Netherlands
- A. Sternin, S. Stober, **J.A. Grahn** (2015) *Tempo estimation from the EEG signal during perception and imagination of music.* 1st International Workshop on Brain-Computer Music Interfacing, Plymouth, UK, June, 2015



- L. McKetton, V. Stone, **J.A. Grahn**, D.W. Purcell, C. Bergevin (2015) *No otoacoustic evidence for a peripheral basis underlying absolute pitch*. International Conference on Perceptual Organization, Toronto, Canada, June, 2015
- C. Bergevin, L. McKetton, V. Stone, **J.A. Grahn**, D. Purcell (2015) *No otoacoustic evidence for a peripheral basis underlying absolute pitch*. Acoustical Society of America, Pittsburgh, USA
- C. Carter, **J.A. Grahn** (2015) *Optimizing music learning: Exploring how blocked and interleaved practice schedules affect advanced performance*. International Symposium of Performance Science, Kyoto, Japan
- K. Patterson, **J.A. Grahn** (2015) *Rhythm perception and production abilities relate to motor impairment and temporal gait variability after stroke*. ISPGR World Congress, Seville, Spain
- E.A. Ready, L.M.J. McGarry, C. Rinchon, J.D. Holmes, **J.A. Grahn** (2015), *Free-walking Rhythmic Auditory Stimulation: Effects of familiarity and perceived groove on gait*. Canadian Society for Brain, Behaviour and Cognitive Science. Ottawa, ON, May, 2015
- E.A. Ready, L.M.J. McGarry, C. Rinchon, J.D. Holmes, **J.A. Grahn** (2015), *Free-walking and synchronized Rhythmic Auditory Stimulation: Effects of individual differences in beat perception, dance and music training on gait*. International Society for the Study of Individual Differences. London, ON, July, 2015.
- V. Wu, D. Cameron, **J.A. Grahn** (2015), *Timing and changes of motor area excitability in beat perception*. SONA (Southern Ontario Neuroscience Association), Hamilton, Canada
- C. Rinchon, L.-A. Leow, **J.A. Grahn** (2015), *Effects of Transcranial Direct Current Stimulation of the Supplementary Motor Area on Absolute and Relative Timing*. SONA (Southern Ontario Neuroscience Association), Hamilton, Canada
- F. Tran, L.-A. Leow, **J.A. Grahn** (2015), *The role of the supplementary motor area and the cerebellum in absolute timing*. SONA (Southern Ontario Neuroscience Association), Hamilton, Canada
- A. Sternin, S. Stober, A.M. Owen, **J.A. Grahn** (2015), *Differentiating music perception and imagination using EEG*. Lake Ontario Visionary Establishment Conference, Niagara Falls, Canada.
- T. Nguyen, **J.A. Grahn** (2015), *Investigating the Effects of Arousal on Cognition*. Lake Ontario Visionary Establishment Conference, Niagara Falls, Canada.
- A. Gibbings, D. Cruse, B. Stojanoski, **J.A. Grahn** (2014), *Attention and presence of a beat affect neuronal entrainment to rhythms*. The Neurosciences and Music V - Cognitive Stimulation and Rehabilitation, Dijon, France
- L. Leow, **J.A. Grahn** (2014), *Synchronizing to the musical beat slows and shortens strides*. The Neurosciences and Music V - Cognitive Stimulation and Rehabilitation, Dijon, France
- L. Leow, T. Parrott, **J.A. Grahn** (2014) *Effects of synchronizing footsteps to the musical beat on gait spatio-temporal parameters*. Lake Ontario Visionary Establishment Conference, Niagara Falls, Ontario, Canada.
- D.J. Cameron, **J.A. Grahn** (2014) *Percussionists' enhanced beat and rhythm production abilities generalize to musically implausible temporal sequences*. Regional conference poster. Lake Ontario Visionary Establishment Conference, Niagara Falls, Canada.
- T. Nguyen, S. Tam, M.C. Wickett, **J.A. Grahn** (2014) *Examining differences in beat perception and production between musicians and dancers*. Poster presented at The 43rd Annual Lake Ontario Visionary Establishment Conference Conference, Niagara Falls, ON, Canada.

- T. Nguyen, **J.A. Grahn** (2014) *How musical mood and arousal affect different cognitive functions*. Poster presented at The 43rd Annual Lake Ontario Visionary Establishment Conference, Niagara Falls, ON, Canada.
- D.J. Cameron, **J.A. Grahn** (2013) *Synchronizing tapping with the beat of complex auditory sequences*. Progress in Motor Control IX, Montreal, Canada.
- T. Nguyen, **J.A. Grahn** (2013) *Context-dependent memory: the effects of musical mood and musical arousal on memory performance*. Society for Music Perception and Cognition, Toronto, ON, Canada
- D. Cameron, **J.A. Grahn** (2013) *Stages of beat perception and the influence of incongruity: An fMRI study*. Society for Music Perception and Cognition, Toronto, ON, Canada
- M. McMahon, **J. A. Grahn**, C. Loveday (2013) *The effect of language and musical training on rhythm perception*. Society for Music Perception and Cognition Conference, Toronto, Canada
- D.J. Cameron, **J.A. Grahn** (2013) *Stages of Beat Perception and the Influence of Incongruity: An fMRI Study*. Rhythm Perception & Production Workshop, Birmingham, UK
- D. Cameron, **J.A. Grahn** (2012) *The effects of beat induction, continuation, and ambiguity on striatal activity during rhythm processing*. Society for Neuroscience, New Orleans, USA
- A.J. McMillan, T.A. Brown, M.F. Joanisse, **J.A. Grahn**, and S.G. Lomber (2012) *There is more than one way to scan a cat: An assessment of two imaging techniques for optimal auditory cortex activation*. Association for Research in Otolaryngology Abstracts, Program No. 511.
- R. Woelfle, **J.A. Grahn** (2012) *Inter-Hemispheric Communication in Musicians and Non-Musicians*. Canadian Journal Of Experimental Psychology-Revue Canadienne De Psychologie Experimentale 66: 283
- J.A. Grahn** (2012) *Chunking vs beat perception in auditory short-term memory*. Proceedings of the Perspectives on Rhythm and Timing Conference, Glasgow, Scotland
- M. Urner, M. Sarri, T. Manly, **J. Grahn**, G. Rees (2012) *Pre-stimulus activity predicts awareness in visual extinction*. .
- P. Armstrong, K. Applegath, **J.A. Grahn** (2012) *Music-Dependent Memory*. Canadian Journal Of Experimental Psychology-Revue Canadienne De Psychologie Experimentale 66:285
- A. Paas, **J.A. Grahn** (2012) *The Influence of Tonality on Rhythmic Perception*. Canadian Journal Of Experimental Psychology-Revue Canadienne De Psychologie Experimentale 66:287
- T. Parrott, **J.A. Grahn** (2012) *Examining Memory for Beat-Based Rhythms*. Canadian Journal Of Experimental Psychology-Revue Canadienne De Psychologie Experimentale 66: 293
- H.K. Beldman, **J.A. Grahn** (2012) *Beat Perception in 3D: A Comparative Analysis Between Sight, Sound, and Touch*. Canadian Journal Of Experimental Psychology-Revue Canadienne De Psychologie Experimentale 66:305
- T. Nguyen, **J.A. Grahn** (2012) *Effects of Mood and Arousal in Pre- and Self-Selected Music on Learning and Memory*. Canadian Journal Of Experimental Psychology-Revue Canadienne De Psychologie Experimentale 66:319-320
- S. Schweizer, **J. Grahn**, A. Hampshire, D. Mobbs, T. Dalgleish (2011) *Training the Emotional Brain: Transferable Effects and Neural Substrates of Affective Brain Training*. 23rd Convention of the Association for Psychological Science, Washington, DC.

- T. Nguyen, B. Graham, A. Duarte, **J. A. Grahn** (2011) *Musical mood and arousal affect different stages of learning and memory performance*. Neurosciences and Music IV: Learning and Memory, Edinburgh, Scotland
- J. A. Grahn** (2011) *Investigation of working memory networks for verbal and rhythmic stimuli*. Society for Neuroscience Abstract Viewer and Itinerary Planner Volume: 41
- T. Manly, **J.A. Grahn**, J. Fish (2010) *Common neural recruitment in diverse sustained attention tasks* Society for Neuroscience Abstract Viewer and Itinerary Planner Volume: 40
- J.A. Grahn**, D. Schuit (2010) *Rhythm abilities relate to phonological short term memory and beat detection skill*. NeuroImage (#908).
- J.A. Grahn**, M. J. Henry, J.D. McAuley (2009) *Effects of prior auditory exposure on brain activity during visual rhythm perception*. Program No. 94.18. 2009 Abstract Viewer/Itinerary Planner. Chicago, IL: Society for Neuroscience, 2009. Online.
- J.A. Grahn**, J.B. Rowe (2008) *Different cues to the beat during auditory sequence perception modulate motor area activity: an fMRI investigation of musicians and non-musicians*. NeuroImage, 41, Supplement 1, (#100).
- J.A. Grahn**, J.B. Rowe (2008) *Different types of cues to the 'beat' in rhythm modulate motor area activity*. Journal of Cognitive Neuroscience Supplement, S227.
- J.A. Grahn**, J.B. Rowe (2007) *Modulation of activity in motor areas by volume accents and beat perception when attending to auditory rhythms*. NeuroImage, 36, Supplement 1, (#167).
- J.A. Grahn**, J.D. McAuley (2007) *Using fMRI to investigate individual differences in beat perception*. Program No. 303.23. 2007 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience, 2007. Online.
- J.A. Grahn**, M. Brett (2005) *The role of the basal ganglia in beat-based rhythm processing*. Journal of Cognitive Neuroscience Supplement: S202-202.
- J.A. Grahn**, M. Brett (2004). *Beat-based rhythm processing in musicians and non-musicians*. Journal of Cognitive Neuroscience Supplement: S184-184.
- J.A. Grahn**, M. Brett (2004) *Beat-based rhythm processing in the brain*. Proceedings of the 8<sup>th</sup> International Conference on Music Perception & Cognition, pp. 207-208. Evanston, IL.
- J.A. Grahn**, M. Brett (2003) *Listening to rhythms that induce an internal beat activates the basal ganglia*. Program No. 390.7. 2003 Abstract Viewer/Itinerary Planner. Washington, DC: Society for Neuroscience, 2003. Online.
- J.A. Grahn** (2002) *Beat-based versus Interval-based Timing: A Matter of Complexity?* Cambridge Music Processing Colloquium, pp.29 -35. Cambridge, UK.

## INVITED TALKS

The role of beat perception in auditory sequence processing <i>Organization for Computational Neuroscience, Allen Institute, United States</i>	2018
Oscillatory entrainment increases with social context <i>Symposium of Nonlinear Dynamics, McGill University</i>	2018
Striatal role in auditory sequence perception <i>Canadian Association for Neuroscience Symposium</i>	2018
Why do we move to music: Rhythm and the Brain <i>Department of Biology, Western University</i>	2018
What Makes Musical Rhythm Special: Cross-Species, Developmental, and Social Perspectives <i>Cognitive Neuroscience Society Symposium</i>	2018
Cross-cultural Comparisons of Neural and Motor Entrainment to the Beat <i>First Annual Timing Research Forum, Symposium</i>	2017
Rhythm and the Brain: The role of the motor system in auditory sequence perception <i>Neuroscience and Cognitive Science Colloquium, University of Maryland</i>	2017
Moving and Grooving: Rhythm, Movement, and the Brain <i>Society for Music Perception and Cognition, San Diego</i>	2017
Movement-Time and Rehabilitation <i>Music, Language, and Cognition, Lake Como Summer School, Italy</i>	2017
Music, Movement, and the Brain <i>University of Montreal, Canada</i>	2017
Feeling the beat: Rhythm, Movement, and the Brain <i>Jyväskylä Centre for Interdisciplinary Brain Research, University Jyväskylä, Finland</i>	2017
Music & Movement <i>Neural Dynamics and Brain Health Conference and Workshop, Baycrest Rotman Research Institute, Toronto</i>	2017
Feeling the beat: Rhythm, Movement, and the Brain <i>James C. Carlsen Invited Lecture, School of Music, University of Washington</i>	2017
Music and the Groove: the Connection Between Movement, Music, and the Brain <i>Institute for Learning and Brain Sciences, University of Washington</i>	2017
Feeling the beat: Rhythm, Movement, and the Brain <i>Department of Physics &amp; Astronomy, Western University</i>	2016
Rhythm and the brain: the role of neural motor areas in rhythm and timing <i>Center for Music in the Brain, Aarhus University, Denmark</i>	2016
Music, movement, and the brain <i>Workshop on the Musical Brain, University of Amsterdam</i>	2016
Motor system involvement in the perception of time: music, rhythm, and the brain <i>Department of Experimental Psychology, Oxford University, United Kingdom</i>	2016
Music, Movement, and the Brain <i>14<sup>th</sup> Annual Conference on Philosophy of Mind, Language, and Cognitive Science, Western University</i>	2016
Music and the Groove: the Connection Between Movement, Music, and the Brain <i>Graduate Student Symposium, University of Guelph, Canada</i>	2016
Rhythmic Auditory Stimulation for Gait Training in Parkinson's Disease <i>Music and Health Colloquium, University of Toronto, Canada</i>	2016
Music and movement in Parkinson's disease <i>Parkinson Society Southwestern Ontario Conference</i>	2015
Music and movement in Parkinson's disease	2015

<i>Parkinson Society Leaders Meeting</i>	
Musical beat perception and computational questions	2015
<i>Multi-disciplinary workshop: Joint Action and Perception in Emergent Phenomena, Centro Internacional de Ciencias, Cuernavaca, México</i>	
Rhythm perception and the motor system	2015
<i>Keynote, Rhythm Perception and Production Workshop, Amsterdam</i>	
Rhythm perception and the motor system	2015
<i>LOVE Conference (Lake Ontario Visionary Establishment Conference), Niagara Falls</i>	
Assessing the role of motor areas in rhythm perception using brain stimulation	2015
<i>Current Topics in Hearing Science and Audiology series, Western University</i>	
Music and the brain	2015
<i>Neuroscience Lecture at St. Lawrence University, NY</i>	
Music and the brain	2014
<i>Innovating Medicine Conference, Lisbon, Portugal</i>	
Beat perception ability and gait improvements in Parkinson's disease	2014
<i>Neurosciences of Music V: Cognitive Stimulation and Rehabilitation</i>	
Feeling the beat: Auditory and motor system involvement in rhythm perception	2014
<i>Cognitive Science Colloquium, Northwestern University, Chicago, Illinois</i>	
Music and the brain	2014
<i>Neuroscience and Education Symposium, Western University, Canada</i>	
The neuroscience of moving to music	2014
<i>NeuroXchange conference, Hamilton, Ontario</i>	
How non-temporal factors influence entrained movement	2014
<i>International Conference on Timing and Time Perception, Corfu, Greece</i>	
Walking to the beat: implications for Parkinson's disease	2013
<i>NSERC-CREATE Annual Workshop, Network in Auditory Cognitive Neuroscience, Hearing and Health, McMaster University</i>	
The perception of musical rhythm: Auditory and motor system involvement	2013
<i>Keynote, Banff Annual Seminar in Cognitive Science, British Columbia</i>	
Auditory and motor system involvement in rhythm perception	2013
<i>Keynote, Canadian Spring Conference on Behaviour and Brain, Fernie, British Columbia</i>	
Why rhythm makes us move: neural investigations of rhythm perception	2013
<i>University of Guelph, Department of Psychology</i>	
Neural investigations of rhythm perception	2012
<i>Rhythm Perception and Production Workshop at Centre for Research on Brain, Language, and Music, Montreal</i>	
Rhythm in the brain: how music can affect movement	2012
<i>Parkinson's Society Regional Conference, Kitchener, Ontario</i>	
Rhythm and beat perception in the auditory and visual modalities	2012
<i>Centre for Vision Research, York University</i>	
Motor area engagement during perception of rhythm	2012
<i>Department of Anatomy and Cell Biology, Western University</i>	
Moving to the beat: rhythm and the brain	2012
<i>Faculty of Music, Western University</i>	
Feeling the beat: brain responses to musical rhythm	2012
<i>Ontario Association of Medical Radiation Technologists Meeting</i>	

Motor system engagement in rhythm and beat perception <i>Music Cognition Symposium, Eastman School of Music and University of Rochester</i>	2012
Links between rhythm perception and the motor system <i>Department of Psychology, Michigan State University</i>	2012
Rhythm perception and the motor system <i>Department of Psychology, Neuroscience &amp; Behaviour, McMaster University</i>	2012
Feeling the beat: Rhythm perception and the motor system <i>Children's Health Research Institute, London, Ontario</i>	2012
Can you see it? Beat perception in auditory and visual modalities <i>McMaster Institute for Music and Mind, McMaster University</i>	2011
Investigating how movement areas in the brain support musical rhythm perception <i>Annual meeting of the Southern Ontario Neuroscience Association</i>	2011
The role of motor areas in musical rhythm and beat perception <i>Ebbinghaus Empire series, Department of Psychology, University of Toronto</i>	2011
Research in neuroscience, music, and the brain: Highlights <i>Leaders' Forum, University of Western Ontario</i>	2010
fMRI investigations of finding the beat versus continuing the beat <i>British Psychological Society Seminar Series, UK</i>	2010
Music and movement: the role of the basal ganglia in music and rhythm perception <i>School of Psychology, University of Birmingham, UK</i>	2010
Music in the brain: fMRI and patient investigations of musical rhythm and motor areas <i>Instituto de Neurologia Cognitiva (INECO), Buenos Aires, Argentina</i>	2010
Feeling the beat: musical rhythm processing in the brain <i>School of Psychology, University of East London</i>	2010
Investigating the neural foundations of rhythm perception using fMRI <i>Developmental Cognitive Neuroscience Unit, UCL, London</i>	2010
Neural investigations of musical rhythm and beat perception <i>Eminent Speaker Series, Goldsmiths College, University of London</i>	2010
Disorders of musical cognition <i>Neuropsychiatry, Addenbrooke's Hospital</i>	2010
Moving to the beat: the role of the striatum in musical rhythm perception <i>Department of Experimental Psychology, University of Cambridge</i>	2010
Feeling the beat: Musical rhythm processing <i>Faculty of Music, University of Cambridge</i>	2010
Prior auditory exposure effects on visual beat perception: a cross-modal investigation using fMRI <i>Workshop on Synchronization in Music and Speech, Free University of Brussels, Belgium</i>	2009
Moving to the groove: Motor responses in the brain during rhythm perception <i>Université Catholique de Louvain, Belgium</i>	2009
Music, rhythm, and movement: Why we fill the silence <i>Peterhouse College, UK</i>	2009
Does phonological short-term memory capacity correlate with rhythmic ability? A comparison of individual differences in nonverbal and rhythm spans <i>UCL Institute of Cognitive Neuroscience, Timing in Speech and Music Workshop</i>	2009
Rhythm processing in the brain: a focus on motor areas <i>Universitat Pompeu Fabre, Barcelona</i>	2009
Rhythm and Dance <i>EPS satellite: Workshop on Dance and the Cognitive Neurosciences</i>	2009

Rhythm and beat perception in the brain <i>Centre for Neuroscience in Education, Cambridge</i>	2008
The role of the basal ganglia in rhythm processing: Evidence from neuropsychology and neuroimaging, Invited symposium speaker <i>Neurosciences and Music III: Plasticity and Disorders, Montreal, Canada</i>	2008
Cognitive deficits in Parkinson's disease <i>Department of Neurology, University of Toledo</i>	2007
The role of motor areas in rhythm and beat perception <i>Max Planck Institute, Leipzig</i>	2007
Connectivity analyses in neuroimaging investigations: Symposium discussant <i>Conference on Language and Music as Cognitive Systems, University of Cambridge</i>	2007
The role of motor areas in rhythm and beat perception <i>Bowling Green State University</i>	2007
The role of motor areas in beat-based rhythm processing <i>Conference on Rhythm, Time and Temporal Organisation, The Institute for Music in Human and Social Development (IMHSD)</i>	2006
Neuroimaging and neuropsychology of beat-based and non-beat-based rhythm processing <i>Rhythms in the Brain Workshop, University of Wales, Bangor</i>	2006
Rhythm processing in the brain <i>School of Psychology, University of Wales, Bangor</i>	2006
Beat-based rhythm processing in the brain: Behavioural, neuroimaging, and neuropsychological investigations <i>Ohio State University, Columbus, OH</i>	2005
Rhythm processing in the brains of musicians and non-musicians <i>Crosstalk Interdisciplinary Colloquium, University of Cambridge, UK</i>	2005
Rhythm and the brain: Evidence for beat-based timing <i>School of Informatics, City University, UK</i>	2004
Beat-based rhythm processing and the basal ganglia <i>Open University, Milton Keynes, UK</i>	2004
The basal ganglia and processing beat-based rhythm in musicians and non-musicians <i>University of California, Berkeley</i>	2004
The basal ganglia and processing beat-based rhythm in musicians and non-musicians <i>Center for the Study of Language and Information, Stanford University, CA</i>	2004
Rhythm processing in the brains of musicians and non-musicians <i>Wolfson College, University of Cambridge, UK</i>	2004
Timing networks and rhythm perception <i>Cambridge University Science and Music Group, UK</i>	2002
Beat-based timing: A matter of complexity? <i>Cambridge University Signal Processing Colloquium</i>	2001

## **PUBLIC ENGAGEMENT**

### **Talks**

Music and the Brain <i>Learning Unlimited (Oxford) in Woodstock, ON</i>	2017
Music and Movement <i>Brain Health Fair, London, ON</i>	2016
Why does music make us move? Rhythm and the brain	2016

<i>BrainCanDo: Music and the Brain, BAFTA, London, UK</i>	
Music, movement and the brain	2016
<i>Inspiring Young Women in STEM Conference, Western University</i>	
What do leaders look like? Combating myths, bias, and anxiety in the path to success	2016
<i>Scholars to Leaders Series, Western University</i>	
Rhythm and the Brain: Why Music Makes us Move	2015
<i>Third Age Learning, Guelph, ON</i>	
Rhythm and the Brain: Why Music Makes us Move	2015
<i>Women's Canadian Club, London, ON</i>	
Music, Movement, and the Brain	2015
<i>Dallas Symphony Soluna Music Festival, Music and Brain Symposium, Dallas, TX</i>	
Alive Inside Screening and Education Event	2015
<i>Panelist for Ontario Association of Non-profit Homes and Services for Seniors, Toronto</i>	
Music as Personalized Medicine: Experiment at SXSW	2015
<i>Invited speaker at SXSW, Austin, TX</i>	
Alive Inside Screening	2015
<i>Panelist for Alzheimer Society London &amp; Middlesex</i>	
Music and the Brain	2014
<i>A.B. Lucas Secondary School, London, ON</i>	
Music and the Mind	2014
<i>Lecture for 'Words for Wisdom', SOS, Western University</i>	
Music and the Brain	2014
<i>Neuroscience Lecture, St. Lawrence University, NY</i>	
Impostor Syndrome	2014
<i>Keynote, Women in Science, Western University</i>	
Mozart and Musical Memory	2014
<i>The Musical Brain: Mozart and the Power of Music (Memory, Myth &amp; Magic), London, UK</i>	
Music on the Brain: Why Music Moves Us	2014
<i>Public Lecture, London Library, Ontario</i>	
How Music Affects Brain and Behaviour	2014
<i>Alzheimer Society of Simcoe County Symposium, Barrie, ON</i>	
Music and the Brain	2014
<i>Georgian Triangle Lifelong Learning Institute, Collingwood, Ontario</i>	
Music and the Brain: Why do we move to music?	2014
<i>Science in Society Speaker Series, Okanagan Science Centre, BC</i>	
Move to the Rhythm	2013
<i>TEDxWaterloo (&gt;47,000 views on YouTube)</i>	
Music and Intelligence	2013
<i>TEDxWestern (&gt;108,000 views on YouTube, TED Editor's pick)</i>	
Music and movement (April 8 and June 4)	2013
<i>Kiwanis Club lecture, London, Ontario</i>	
Music and the Brain	2012
<i>Harry Somers Lecture, Stratford Summer Music Festival</i>	
In the groove: the connection between music, movement, and the brain	2012
<i>Student Open Day, UWO</i>	
The science of being human: Nature and Nurture	2012
<i>Public lecture, London Library, Ontario</i>	



The neuroscience of music: How rhythm moves us <i>Public lecture, Eton College, UK</i>	2011
My Musical Brain <i>Newcastle Science Festival, UK</i>	2011
Music, movement, and the Brain <i>Manchester Science Festival, UK</i>	2010
Current findings in music neuroscience <i>The Musical Brain: Arts, Science, &amp; the Mind (Wellcome Trust). *Highlighted in Nature</i>	2010
Hit me with your rhythm schtick: The connection between music, movement, and the brain <i>British Science Festival Charles Darwin Award Lecture</i>	2010
Great music and why we love it <i>Keynote/rehearsal discussion The Nash Ensemble and the Musical Brain (Wellcome Trust)</i>	2009
Does music make you smarter? <i>Science Week, Cambridge, UK</i>	2009
In the groove: Rhythm processing in the brain <i>Science Week, Cambridge, UK</i>	2006

August 11, 2018, interview BBC Radio 4, UK

March 16, 2018, Invited talk, Western Talks Science

## Interviews

Music Might Help Neil Diamond Fight His Parkinson's Disease – Daily Beast	2018
How a song brings out your beast- 3 songs to listen to during your next workout- Men's Health	2018
These are the songs playing in your hospital's operating room- doctor's orders- Toronto Star	2017
Syncopation Syncopation Syncopation- BBC Radio 3, UK	2018
Recharge: Make Time for Playing an Instrument- Family Circle Magazine	2017
The song "Despacito" and the brain – Planeta Gente NTN24	2017
Groove, Brain, and "Despacito" – NTN24 International News Channel	2017
Why do we like "Despacito" so much? – W Radio Colombia	2017
What the song "Despacito" does to your brain – BBC Mundo	2017
Feeling the Beat, The Clocks in Your Mind – Cadence Podcast	2017
Feel the Beat – EMBO Reports	2017
How music transformed a man with Parkinson's – CTV News	2017
Music's Ability to Alleviate Stress - KPCC Airtalk Radio	2017
Music as Medicine Part 2 – CTV News	2016
Express yourself: how music plays with our emotions – the Guardian	2016
Can Music Make You Hungry? – Completely Optional Knowledge podcast	2016
Music on the Brain – Catalyst, ABC Television, Australia	2016
CBC Radio on musical learning	2015
Why does music give us chills? – the Guardian	2015
Why listening to music can make you as fit as a fiddle: It can help your body fight infection and recover after ops – Interview with Daily Mail UK	2015
Can music be used as medicine? – the Atlantic Magazine	2015
CBC Radio Interview	2015
Electronic Dance Music, documentary interview for bpm:tv	2015

How the brain responds to music - Interview for US Women's Health magazine	2014
Learning to play an instrument as an adult vs a child – Huffington Post	2014
How Music Affects The Brain – University Affairs Article	2014
Musical Training and Brain Structure – Voice of Russia Radio Show	2013
Music and Exercise – Scott Radly Radio Show, Hamilton	2013
Mozart Effect – Voice of Russia Radio Show	2013
Let's Get Physical: The Psychology of Effective Workout Music – Scientific American	2013
Partners in Research National Awards, Interview played at awards ceremony	2013
Pleasant and unpleasant sounds – CJXX Radio: 1	2013
Dara O'Brian's Science Club – BBC2 TV (Interview and MRI scan of presenter)	2012
Jay Ingram: From the Inside Out– Discovery Channel, (Interview and MRI scan of presenter)	2012
Drumming and cognition – CJXX Radio 1	2012
Interviews about Grammy Foundation Grant – Metro News London, London Free Press	2012
Q Show with Jian Ghomeshi – Interview, CBC Radio	2012
Metamorphosis series – Interview by Richard Syrrrett CBC Radio	2012
Links between music, movement, and the brain– Radio interviews on CBC, CJXX, CJBK, AM980	2012
Music therapy – CJXX Radio: 2	2011
Music neuroscience - CJXX Radio 2	2011
Enigmas of Music and the Brain – C5N Television, Argentina	2011
The myth of the Mozart effect – BBC Radio 4	2011
Music and the Brain – BBC West Midlands, UK	2010
Reflections on Being a Scientist – Film Documentary	2010
Music and the Brain – Argentine newspaper <i>Perfil</i> ,	2010
Putting brain training to the test: various press interviews, including <i>Time magazine</i> , NPR, BBC	2010
Five live, <i>Wall Street Journal</i> , <i>Business Week</i> , <i>Toronto Star</i> and others.	
Professor Regan's...Nursery – BBC2 TV (Interview and MRI scan of presenter)	2009
The Musical Brain – Woman's Hour, BBC Radio 4	2009
Move to the Music – Monitor on Psychology, American Psychological Association	2009
<b>Demonstrations and interactive events</b>	
Brain and Mind Institute Open House	2018
Discovery Day Research Demonstrations, Canadian Medical Hall of Fame	2018
11 <sup>th</sup> Annual London Brain Bee	2018
SHAD (Canadian high school enrichment program) Research Demonstrations	2017
Discovery Day Research Demonstrations, Canadian Medical Hall of Fame	2017
10 <sup>th</sup> Annual London Brain Bee	2017
Banting High School Brain & Mind Institute tour	2016
Mensa Brain & Mind Institute Tour	2016
9 <sup>th</sup> Annual London Brain Bee	2016
Royal Canadian for Science Gala Dinner	2016
Michael J Fox Clinical Research Fair, Toronto, ON	2015
Discovery Day Research Demonstration, Canadian Medical Hall of Fame	2015
Brain Fair, London, ON	2015
Discovery Day Research Demonstration, Canadian Medical Hall of Fame	2014
BMI day, lab presentation and demo for Thames Valley District School Board's Gifted Program	2013
Discovery Day Research Demonstration, Canadian Medical Hall of Fame	2013
BMI day, lab presentation and demo for Thames Valley District School Board's Gifted Program	2012
Science pub night, sponsored by Rotman Institute of Philosophy, lecture and discussion	2012

Rhythms in your brain, Interactive lecture, Lovebox music festival, London, UK	2010
The power of music, Royal Society 350th Anniversary Summer Science Exhibition: Interactive exhibit	2010
Rhythms in your brain, Interactive lecture, the Secret Garden Party festival, UK	2010
Improvisation, Creativity, and Music, a dialogue between neuroscience and music (with Gilad Atzmon), Institute of Neuroesthetics, London, UK	2010
Music and neuroscience: Does music make us brighter?, Cambridge Music Festival, UK	2009
BBC Radio 3 Documentary on Musical Savants, consultant	2009
Music and your brain, Latitude Festival, Guerrilla Science, Interactive talk, Q&A	2009
Music and your brain, The Secret Garden Party, Guerrilla Science, Interactive talk, Q&A	2009
Testing memory for regular and irregular rhythms, Science Week, Cambridge. Interactive experiment	2004
Rhythm processing in the brains of musicians and nonmusicians, House of Commons: Science, Engineering, and Technology for Britain, poster presentation to Ministers of Parliament	2004
Musical Rhythms: How we feel the beat? Science Week, Cambridge. Interactive Experiment	2003
<b>Other</b>	
Rhythmic Auditory Stimulation Therapy	2015
<i>Article for The Parkinson's Update (Parkinson Society Southwestern Ontario)</i>	
Learning by heart	2015
<i>Article for Official BBC Proms Guide</i>	
Member, Virtual Researchers On Call, Experts on Demand	2013

## SERVICE

### *Editorial Boards*

Associate Editor, Psychomusicology: Music, Mind, and Brain	2018 – pres
Associate Editor, Music Perception	2017 - pres
Associate Editor, PLoS ONE	2015 - pres
Associate Editor, Frontiers in Auditory Cognitive Neuroscience	2015 - pres
Section Editor, Neuroscience, Oxford Handbook of Music Psychology, 2 <sup>nd</sup> Edition	2015
Consulting Editor, Timing and Time Perception	2012 - pres
Review Editor, Frontiers in Auditory Cognitive Neuroscience	2012 - pres

### *Reviewer (Ad hoc)*

*Journals:* Current Biology; Journal of Neuroscience; Brain; eLife; Journal of Cognitive Neuroscience; Cerebral Cortex; NeuroImage; Cortex; European Journal of Neuroscience; Human Brain Mapping; Behavioral Neuroscience; PLoS ONE; Brain and Cognition; Frontiers in Auditory Cognitive Neuroscience; Frontiers in Computational Neuroscience; Frontiers in Perception Science; Neuroscience Letters; Cognitive Brain Research; Experimental Brain Research; Behavioural Brain Research; Social Neuroscience; Cognitive, Affective, and Behavioral Neuroscience; Scientific Reports; Journal of Experimental Psychology: Human Perception and Performance; Journal of Experimental Psychology: General; Attention, Perception, & Performance; Perception; Psychonomic Bulletin & Review; Psychological Research; Acta Psychologica, Topics in Cognitive Science; Imaging in Medicine; Empirical Musicology Review; Psychomusicology; Neuropsychological Rehabilitation; Behavior Research Methods

*Funding Agencies:* Canadian Institutes for Health Research; Social Sciences and Humanities Research Council (Canada); National Science Foundation (USA); Canada Research Chairs program; Canadian Foundation for Innovation; Medical Research Council, UK; Austrian Science Fund; French National Research Agency; Parkinson's UK; Danish Council for Independent Research; Einstein Foundation, Germany; Stroke Association, UK; Research Foundation –

Flanders	
<i>University of Western Ontario</i>	
<b>Committees/Chairs</b>	
Chair, Cognitive, Developmental, and Brain Sciences Area, Psychology Dept	2017 - 2018
Graduate Affairs committee, Psychology Dept	2017 - 2018
Appointments committee, Psychology Dept	2017 - 2018
Program Committee , Neuroscience Graduate Program	2015 - 2018
Graduate Neuroscience Steering/Advisory Committee	2016 -
Performance Studies P&T Committee at Don Wright Faculty of Music	2015
Psychology Department Social Committee	2014 - 16
Brain and Mind Institute Steering Committee	2013 - pres
Psychology Annual Performance and Evaluation Committee	2012, 14
Rotman Institute of Philosophy/Brain & Mind Institute external speaker committee	2012 - 2015
Workplace and Resource Planning committee	2011 - 2013
Graduate Award and Selection committee	2011 - 2012
Faculty of Education council, out-of-faculty representative	2011 - 2013
<b>BrainSCAN Initiative</b>	
Accelerator Award Grant Review committee	2017
Highly Qualified Personnel committee	2017 -
<b>Other</b>	
Western Women in Neuroscience, Faculty Mentor	2015 -
Mentoring Female Graduate Students: <i>Presentation and panellist</i>	2017
Graduate Writing Conference talk: <i>Just do it: how to write in grad school</i>	2016
Scholars to Leaders Series Presentation: <i>What do leaders look like? Combating myths, bias, and anxiety in the path to success</i>	2016
March Break Open House presentation: <i>Moving to the groove: How are brains respond to the beat.</i>	2016
Teaching Support Centre talk	2015
Neuroscience programme promotional video interview	2014
Ontario Graduate Scholarship Psychology Panel	2012
Teaching Support Centre panellist for Research Support: Beyond the Three Councils	2012
Liaison for United Way charitable campaign	2011
School of Postdoctoral and Graduate Studies "Consult the experts" Grant panel	2011
Neuroscience poster judge at UWO Margaret Moffat Research Day	2011
<i>MRC Cognition and Brain Sciences Unit</i>	
Member, Royal Society 350 <sup>th</sup> Anniversary Exhibition Planning Committee	2010
Chair and Founder, Equality Committee	2009 - 2010
Web content administrator and Member, Web Management Committee	2008 - 2010
Founding member and organizer, Postdoctoral network	2005 - 2010
MRI scan manager, Cambridge Cognitive Neuroscience Research Panel	2003 - 2010
Member, MRC CBU Unit Management Committee	2001 - 2010
<i>University of Cambridge</i>	
Gates Cambridge scholarship, Biological Sciences Interview panel	2008 - 2010
<i>Clare Hall, University of Cambridge</i>	
Member, Computing Committee	2008 - 2009

Member, Search Committee for Clare Hall President	2007
Member, Official Fellowship Committee	2005 - 2009
Member, Governing Body	2004 - 2009
Member, Tanner Lectures Committee	2004 - 2005
<i>Other:</i>	
Member, Program Committee, Society for Music Perception and Cognition conference	2017
Secretary, Executive Board, Society for Music Perception and Cognition	2015 - 2018
Scientific Advisory Committee: International Conference on Music Perception and Cognition, San Francisco, United States	2015
Chair, Program Committee: Society for Music Perception and Cognition, Nashville, Tennessee	2015
Member, Program Committee, 2nd Conference of the Australian Music and Psychology Society (AMPS)	2015
Member, Review Committee, European Society for the Cognitive Sciences of Music	
Co-Chair, Scientific Advisory Committee: International Association for Music and Medicine, Toronto, Canada	2014
Scientific Advisory Committee: International Conference on Music Perception and Cognition, Seoul, South Korea	2014
Session Chair, Society for Music Perception and Cognition Conference, Toronto, Canada	2013
Co-organizer, Lake Ontario Visionary Establishment Annual Conference	2012 - 2014
Membership Secretary, Executive Board, International Society for Behavioural Neuroscience	2012 - 2014
Session Chair, Perspectives on Rhythm and Timing Conference, Glasgow, Scotland	2012
Session Chair, 12 <sup>th</sup> International Conference on Music Perception and Cognition, Thessaloniki, Greece	2012
Member-at-Large, Executive Board, International Society for Behavioural Neuroscience	2010 - 2012
Gates Alumni Ambassador	2010 - pres
Session Chair, 10 <sup>th</sup> International Conference on Music Perception and Cognition, Sapporo, Japan	2008
Talk, "On being a postdoc", Society for Education, Music and Psychology Research Student Conference	2008

## **TRAINEE SUPERVISION**

### **Current trainees**

**Postdoc:** Lucy McGarry, Molly Henry, Nathan Oesch

**Postdoc (co-supervised):** Christina vanden Bosch der Nederlanden

**PhD** Aaron Gibbings, Josh Hoddinott, Kristi Van Handorf

**PhD (co-supervised):** Abdullah Al-Jaja, Emily Ready, Elizabeth Kinghorn, Avital Sternin, Sarah Schwanz

**MSc:** Syed Raza

**MSc (co-supervised):** Justin Hopper

**BA/BS honours thesis:** Xin (Cynthia) Qi

**Past trainees****Postdocs [5]**

Eric Taylor	2016-18
Daniel Cameron	2016-17
Li-Ann Leow	2012-14
Sebastian Stober (co-supervised)	2013-15
Cristina Nombela Otero (co-supervised)	2009-10

**PhD students [5]**

Demian Kogutek	2016-18
Tram Nguyen	2013-17
Daniel Cameron	2012-16
Fleur Bouwer (co-supervised, University of Amsterdam)	2012-16
Demian Kogutek (co-supervised)	2013-18

**MSc/MA students [8]**

Brendon Samuels (co-supervised)	2016-18
Josh Hoddinott	2016-18
Abdullah Al-Jaja (co-supervised)	2016-17
Brittany Roberts	2015-17
Avital Sternin (co-supervised)	2014-16
Aaron Gibbings	2012-14
Tram Nguyen	2011-13
Taylor Parrott	2011-13

**MSc (thesis only) students [2]**

Meike Molenveld (Maastricht University, co-supervised)	2009
Dirk Schuit (Maastricht University, co-supervised)	2009

**BS/BA honours students [34]**

Kwesi Asantey, Neeraja Dharan, Megan Fung, Maya Gantar, Ben Shapiro, Drew Stapley	2017-18
Justine Czajka, Jamal Howlander, Garrett Myles, Stephanie Reesor, Sarah Schwanz, Johannes Teselink	2016-17
Jana Celina Everling, Sean Gilmore, David Prete, Daphne Hui	2015-16
Felicia Zhang, Frank Tran, Victor Wu, Jerome Iruthayarajah	2014-15
Angela Marca, Kristina Wacławik, Sarah Watson	2013-14
Katelyn Barnes, Sonam Maghera, Steve Shaw, Karen Stoskopf	2012-13
Heather Khey Beldman, Anita Paas, Rebecca Woelfle	2011-12
Tram Nguyen, Paul Armstrong, Ashley Ann Perl	2010-11
Andrew Robertson (Faculty of Music, University of Cambridge)	2008-09

**PhD/DM placement project students [3]**

Fleur Bouwer (University of Amsterdam, PhD)	2014
Molly Henry (Bowling Green State University, PhD)	2008
Christine Carter (Manhattan School of Music, DM)	2011-13

**BA/BS placement project students [7]**

Anne-Maude Patouillard (Université Grenoble Alpes, France)	2017
Anjali Kumar (Smith College)	2016
Lauren Edwards (Santa Clara College)	2015
Sarah Winokur (Smith College)	2013
Hannah Partridge (University of Cambridge)	2011
Alice Kay, Sarah Griffiths (University College London)	2010

Megan Masters (Cardiff University)	2009
<b>Independent study students [3]</b>	
BS: David Prete, Cricia Rinchon	2014-15
MMus: Elizabeth Kinghorn (co-supervised)	2012-14
<b>High school placement projects [3]</b>	
Adrianna Klid (St. Mildred's-Lightbourn School, Oakville, ON)	2017
Sanjana Sanghani (St. Francis High School, CA, USA)	2016
Maryyum Mehmood, awarded Nuffield Bursary and British Science Association CREST award (Perse School for Girls, Cambridge)	2008

### PROFESSIONAL SOCIETIES

Society for Neuroscience, Cognitive Neuroscience Society, Association for Psychological Science, Canadian Association for Neuroscience, American Psychological Association, Organization for Human Brain Mapping, Society for Music Perception and Cognition, Association for Psychological Science, Sigma Alpha Iota, Women in Cognitive Science, Women in Cognitive Science-Canada, International Society for Behavioral Neuroscience, Southern Ontario Neuroscience Association, Psychonomic Society  
 August 11, 2018, interview BBC Radio 4, UK

April 9, 2018, interview with "The Listening Service", BBC Radio 3, UK

March 16, 2018, Invited talk, Western Talks Science

Jan 16, 2018, Interview with Men's Health--<https://www.mh.co.za/guy-skills/how-a-song-brings-out-your-beast-and-3-songs-to-listen-to-during-your-next-workout/>

Nov 18, 2017, Interview with Toronto Star--  
[https://www.thestar.com/life/health\\_wellness/2017/11/18/rocking-in-the-or-doctors-pump-up-the-jams-during-surgery.html](https://www.thestar.com/life/health_wellness/2017/11/18/rocking-in-the-or-doctors-pump-up-the-jams-during-surgery.html)

Oct 2017, Interview with Family Circle magazine--<https://www.familycircle.com/family-fun/recharge-make-time-playing-instrument/>