

## UPCOMING EVENTS

### Register Now for IAMM 3<sup>rd</sup> International Conference 2014

The 3<sup>rd</sup> International conference of IAMM will be held at the University of Toronto June 24 - 27 2014.

The 3<sup>rd</sup> International Conference of the International Association for Music & Medicine is promising to be an outstanding event with an unprecedented line-up of Keynotes and Plenaries. On the theme of Music Medicine through the Lifespan, three keynote addresses, looking at childhood, adulthood, and the later years, will be presented by Dr. Laurel Trainor, Director of the McMaster Institute for Music and Mind, Dr Julian Thayer, Ohio Eminent Scholar Professor in Health Psychology, Ohio State University, and Dr. Alicia Ann Clair, Professor and Director of Music Education and Music Therapy at the University of Kansas. Dr. Clair is also a Research Associate in Gerontology at KU. In addition there will be three neuroscience plenaries featuring MaHRC associates and three hospital research associates featuring music research being conducted at Toronto hospitals. A special feature is the talk at the conference dinner by internationally celebrated neuroscience writer and MaHRC associate, Dr. Norman Doidge.

For general conference information and program details, please see

<http://www.iammcanada.com>

You may register for the whole event or by the day. Check out the favourable rates for students and IAMM members.

### Music Therapy Training Course at MaHRC – May 2-3



On May 2 – 3, MaHRC is offering a Continuing Education Experience for Music Therapists with instructor Blythe LeGasse. Dr. Blythe LaGasse is Coordinator and Assistant Professor of Music Therapy at Colorado State University. Dr. LaGasse holds degrees from the University of Kansas (Ph.D. with Music Therapy and Communication

Neuroscience emphasis), Colorado State University (M.M. in Music, Music Therapy), and University of Kansas (B.M. in Music Therapy). Additionally, and she holds Certification in Neurologic Music Therapy (NMT). With a strong background in communication neuroscience, her research interests include the use of music to improve communication and cognitive skills in children with developmental disabilities and autism spectrum disorders. At CSU, Dr. LaGasse teaches undergraduate and graduate coursework in Music Therapy, coordinates the Music Therapy Clinics, and Directs the Music Therapy Distance Learning Program.

**Course Title:** Neuroscience, Speech and Language Training in Music Therapy

**Date:** May 2, 5-9 pm & May 3, 10am-5 pm, 2014

**Location:** University of Toronto, Faculty of Music

**Course Fee:** \$160 (Includes lunch and refreshment breaks)

**Course Description:** This course unfolds in two modules: Neuroscience of Music Therapy & Facilitating Speech and Language in Music Therapy

### ***Neuroscience of Music Therapy:***

Have you ever wanted to better understand articles about music in the brain or explain what is happening when your clients listen to music? This continuing education experience will help the music therapy clinician understand basic neuroscience. We will go over important brain areas, systems, and networks. We will then explore how music activates the brain. This information will be presented so that clinicians can better: (1) read research by knowing basic structures, and (2) explain how music can affect behavior. We will relate information to different client populations. You will learn through lecture, video supplements, and coloring! **In order to maximize time in person, participants will engage in 2 hours of self-led video instruction before May 2<sup>nd</sup>.**

Learning Objectives:

Participants will have the opportunity to:

- learn basic neurological systems
- understand how music therapy treatment can promote brain changes to improve nonmusical skills
- learn how current neuroscience research literature can inform treatment implementation
- understand basic science language that may be used in professional conversations

### ***Facilitating Speech and Language in Music Therapy***

Many music therapists work with individuals who have speech and language needs. This continuing education experience is designed to help the professional music therapist learn about the neurological and developmental aspects of speech and language as they relate to client populations. We will review current research and apply findings to client populations across the ages. We will practice using techniques that can facilitate functional speech and language goals. We will also learn about some assessment tools

that can be used to measure progress. **In order to maximize time in person, participants will engage in 1 hour of self-led video instruction before May 2<sup>nd</sup>.**

Learning Objectives:

Participants will be able to:

- identify major factors in speech and language disabilities
- consider the role of neurological development in the production of speech
- identify the mechanisms that allow music to help in the development of speech and language
- identify relevant music therapy interventions for speech and language training

For more information contact:

Doreen at [doreen.polestar@sympatico.ca](mailto:doreen.polestar@sympatico.ca)

**PLEASE NOTE:** Although this course is financially subsidized by MaHRC, a minimum number of 15 registrants will be required to run the training. *If sufficient numbers are not registered by March 31<sup>st</sup> the training will be cancelled and fees refunded*

**DISCLAIMER:** These courses are not endorsed by the RF Unkefer Academy for Neurologic Music Therapy. Although the courses may introduce some Neurologic Music Therapy Concepts, completion of these courses does not allow the participant to practice Neurologic Music Therapy nor does it take the place of the International Training Institutes in Neurologic Music Therapy which are conducted by the Robert F. Unkefer Academy for Neurologic Music Therapy and endorsed by the World Federation of Neurologic Rehabilitation (WFNR), by the European Federation of Neurorehabilitation Societies (EFNS), and the International Society for Clinical Neuromusicology (CNM).

## Videos Online

### Sound Health: The Potential For Music Effects In Aging



Lee Bartel, PhD, Professor, Associate Dean – Research, and Acting Director of MaHRC

Talk at Institute for Life Course and Aging, Noon-Hour Seminar

See the talk at:

<http://hosting2.epresence.tv/AGING/1/watch/188.aspx>

## Tasty Coloured Sounds: The Experiences of Synaesthetes



Dr. Julia Simner, Neuropsychologist, Director of Synesthesia and Sensory Integration lab at the University of Edinburgh, Scotland.

Talk at Faculty of Music, MaHRC, with support from OCAD University, The Colour Research Society of Canada, and the Fraser Mustard Institute for Human Development.

See talk at: <https://www.youtube.com/watch?v=4vFqNjySBHk>

## Graduate Student Research in Music and Health

A number of graduate students in the PhD program and in the DMA program are pursuing dissertation research in the field of music and health.

**Charlene Santoni**, DMA student is developing a study entitled: The implementation of instructional singing voice techniques in the rehabilitative voice therapy protocol for children with functional voice disorders caused by unilateral vocal fold paralysis. She is currently at the stage of submitting proposals to the ethics review boards. Her supervisory team includes Dr. Paolo Campisi, Otolaryngologist and Jennifer Allegro, Audiologist at Sick Kids Hospital and Profs. Lorna MacDonald and Lee Bartel at the Faculty of Music.

**Alicia Howard**, PhD student is developing a study focused on Temporomandibular Disorder (TMD) and Music Medicine. She is currently at the stage of developing a formal proposal and submitting to the ethics review boards. Her supervisory team includes Dr. Howard Tenenbaum, Professor and Head of Periodontology at the Faculty of Dentistry, University of Toronto, and Head of Periodontics at Mount Sinai Hospital; Dr. Allan Gordon, Director of the Water Pain Management Centre at Mt. Sinai Hospital; and Prof. Lee Bartel.

**Vivek Sharma**, PhD student and member of the Collaborative Program in Neuroscience (CPIN) is developing a proposal for a study addressing the questions: How is the human brain adapting to music listening while navigating through a modern infrastructure? Is the integration of music and technology separating us from our social environments? He will be developing a supervisory team involving neuropsychology and music.

**Lisa Tahara**, DMA student is nearing completion of a study entitled: Music and Keyboard Improvisation for Healthy Older Adults. She has looked at how quality of life is enhanced through piano lessons. Her supervisors are Profs. Midori Koga and Lee Bartel.

**Cheryl Jones**, PhD student and member of the Collaborative Program in Neuroscience (CPIN) is developing a proposal in the area of Music in Neurorehabilitation. Cheryl is currently an active Neurologic Music Therapist working clinically in neurorehabilitation.

**Linnea Thacker**, DMA student coming into the program in fall 2014 and is planning research on "Strategies for the Identification and Prevention of Performance-Related Musculoskeletal Disorders in Musicians." She has the distinction of being the first student at the Faculty of Music to be awarded funding support from CIHR in the form of a Frederick Banting and Charles Best Canada Graduate Scholarship. She will be working with Lee Bartel.

## **RESEARCH FEATURE**

### **A Multi-stage Study of Cochlear Implant Recipients' Enjoyment of Music.**

A series of studies is in progress at Sunnybrook Hospital under the leadership of MaHRC Associate, Dr Joe Chen, Chief Otolaryngologist, and Prof. Lee Bartel. The team has included: Dr. Hosam Amodi, Dr. Simon Greenberg, Dr. Ashlin Alexander, Dr. Lendra Friesen, David Shipp, Samidha Joglekar, and Leah Smith.

**Project Purpose:** To develop diagnostic and rehabilitation tools for post-lingual cochlear implant recipients to enjoy music.

**Description:** A qualitative case study was completed in 2007 and the results published and reported at several international academic conferences. The second stage was the development of a computer-based music enjoyment measure, a perception diagnostic tool, and a training program built on the Sohlberg & Mateer Attention Model. The program is called MusicEAR – Music Enjoyment and Ability Retraining. Software programmers created the first version of the program in 2007 – 2008 with reprogramming in 2012-2013 from Unix Java to Adobe Air. In 2010 -2011 we ran a validity – reliability study with 40 participants.

We received funding in Fall 2011 from Med El (\$135,000) for a trial of the retraining function. A small pilot is currently underway, which if successful, will lead to a more substantial clinical trial with about 80 participants. During the past year, through MaHRC, additional sound files were composed by John Herberman to add to the training dimension of "MusicEAR"

Funding for the study to date stands at about \$60,000 from Sunnybrook for the Diagnostic research plus the \$135, 000 for the retraining.

Publications from these studies include:

Osam, H., Friesen, L.M, Fujioka, T., Bartel, L. & Chen, J. (Submitted). How adult cochlear implant recipients listen to music. *Ear and Hearing*.

Amoodi, H., Bartel, L, Friesen, L, & Chen J. (2012). Test-retest Reliability and Internal Consistency of MusicEAR Administered to Cochlear Implant Users. *Otology & Neurotology*.

Alexander, A, Bartel, L, Friesen, L, Shipp, D. and Chen J. (2011) From Fragments to the Whole: A Comparison between Cochlear Implant Users and Normal Hearing Listeners in Music Perception and Enjoyment. *Journal of Otolaryngology-Head & Neck*. Vol. 40, No 1, pp 1 – 7.

Lee Bartel, Daniel Bodmer, David Shipp, Jodi Ostroff, Joseph M. Chen (2011) Qualitative Case Studies of Five Cochlear Implant Recipients' Experience with Music *Cochlear Implants International* Vol. 12, Number 1. pp. 27-33.

Bartel, L., Ostroff, J., Bodmer, D., Shipp, D., Chen, J. M. (2008). Music Education Dimensions of Cochlear Implant Recipients' Experience with Music: From Five Qualitative Case Studies to Attention-based Diagnosis and Training. Publication in the Proceedings of the RAIME Conference, Miami, 2007

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On the MaHRC Newsletter is created and edited by: Prof. Lee Bartel, Associate Dean-Research and Acting Director of MaHRC. For questions or comments: [music.research@utoronto.ca](mailto:music.research@utoronto.ca)

### **Adjunct and Status-Only Appointed Members of MaHRC, Faculty of Music:**

**Heidi Ahonen**, PhD, MTA. Professor of Music Therapy at Wilfrid Laurier University.

**Claude Alain**, PhD. Assistant Director and Senior Scientist of the Rotman Research Institute at the Baycrest Centre

**Quincy Almeida**, PhD. Director, Sun Life Movement Disorders Research & Rehab Centre, Wilfrid Laurier University.

**Dr. David Alter**, MD, PhD, FRCPC. Cardiologist, Senior Scientist in the Institute for Clinical Evaluative Sciences.

**Dr. Jennifer Anderson**, MD, FRCSC. St Michael's Hospital, Otolaryngologist in Chief, Department of Otolaryngology - Head and Neck Surgery

**Gavin Andrews**, PhD. Professor, Department of Health, Aging, & Society, McMaster University.

**Dr. John Axler**, MD, CCFP. Director of Continuing Education Projects for the Department of Family and Community Medicine, University of Toronto.

**Katherine M. Boydell**, PhD. Senior Scientist and Scientific Dir of Qualitative Inquiry, Child Health Evaluative Sciences, The Hospital for Sick Children.

**Dr. Davor Cepo**, DC. Wasser Pain Management Centre, Mount Sinai Hospital

**Tom Chau**, PhD. Vice Pres, Research - Holland Bloorview Kids Rehab; Director - Bloorview Research Inst; Canada Res Chair in Paediatric Rehab Eng

**Dr. Joseph Chen**, MD, FRCSC. Otolaryngologist-in-Chief at Sunnybrook Health Sciences Centre; Associate Professor, University of Toronto.

**Joyce Chen**, PhD. Stroke Rehabilitation Scientist, Heart and Stroke Foundation Centre for Stroke Recovery, Sunnybrook Hospital

**Dr. John Chong**, MD, CGPP, ABIME, FACPM, FRCPC, DOHS, ARCT. Medical Director of Musicians' Clinics of Canada.

**Amy Clements-Cortes**, PhD, MTA, MT-BC, FAMI. Senior Music Therapist, Baycrest Centre; Assistant Professor (Research) Faculty of Music, U of T

**Angela Colantonio PhD**. Prof, Dept of Occup Sci & Occup Therapy, Dalla Lana Sch of Pub Health; Grad Dept of Rehab Sc, Fac of Med, U of T

**Karen Davis, PhD**. Prof. Surgery; Head, Div of Brain, Imaging and Behaviour - Systems Neuroscience, Tor Western Res Inst, UHN

**Maureen Dennis, PhD**. Senior Scientist, Psychology, The Hospital for Sick Children; Professor, Institute Medical Sciences

**Dr. Norman Doidge, MD, FRCP(C), MACPsa**. Assistant Professor of Psychiatry, Faculty of Medicine, UT, CAMH Clarke Institute Division.

**Colleen Dockstader**, PhD. Research Associate, Mabbott Laboratory, Sick Kids Hospital.

**Michael J Evans, PhD**. Professor of theoretical statistics and biostatistics, U of T, cross-appointment to the Dalla Lana School of Public Health.

**Joaquin Farias** PhD. Prof of Ergonomics at the Conservatorio Superior de Música de Sevilla; Researcher, School of Medicine at the Univ of Valencia.

**Dr. Morris Freedman** MD FRCP(C). Exec Medical Dir Centre for Memory and Neurotherapeutics; Medical Dir of the Ross Memory Clinic at Baycrest

**Shari Geller**, PhD. Clinical Psychologist; Faculty in Health Psychology, York University;

**Dr. Allan Gordon, MD, FRCP(C)** Clinical Neurologist and Director of the Wasser Pain Management Centre, Mount Sinai Hospital.

**Jessica Grahn, PhD** Assistant Professor at the Centre for Brain and Mind in the Department of Psychology, University of Western Ontario.

**Robert Harrison**, PhD. Senior Scientist in Otolaryngology, Neurosciences & Mental Health, and Auditory Science at Sick Children's Hospital;

**Sylvain Houle**, PhD. Director of the Research Imaging Centre at the Centre for Addiction and Mental Health (CAMH) and the University of Toronto.

**Gabriela Ilie**, PhD. Lecturer, Department of Psychology, UTS; Post-Doc St. Michael Hospital, Neurosurgery, Injury Prevention Office and CAMH

**Pia Kontos**, PhD. Scientist, Toronto Rehabilitation Institute; Assistant Professor in the Dalla Lana School of Public Health.

**Nancy J. Lobaugh**, PhD. CAMH Indep Scientist, Research Imaging Centre MRI Suite and Assist Prof of Neurology at the U of T Faculty of Medicine.

**Aaron J. Low**, MSc. Speech-Language Pathologist, The Voice Clinic, Toronto.

**Renee Lyons**, PhD, Scientific Dir, Bridgepoint Collaboratory for Research and Innovation; Professor in the Dalla Lana School of Public Health at Uof T.

**Lynn McDonald**, PhD. Prof, Faculty of Social Work; Dir, Inst for the Life Course and Aging; Scientific Dir, National Initiative for Care of the Elderly

**Patricia McKeever**, PhD. Sen Scientist, Bloorview Kids Fndn Chair in Childhood Disability Studies, Bloorview Research Institute; Prof, Fac of Nursing

**Dr. Henry Moller**, MD, DABSM, FRCPC. Assistant Professor, Department of Psychiatry, University of Toronto; Toronto Sleep Clinics.

**Sylvain Moreno**, PhD Scientist, Rotman Res Inst, Baycrest; Assist Prof, Dept of Psychology; Dir, NeuroEducation Across the Lifespan Lab, Rotman.

**Dr. Lili Naghdi**, MD, CCFP. The Health Centre of Maple, Sound Therapy Centre of Vaughan.

**Kristine Newman**, RN, CRN(C), PhD. Daphne Cockwell School of Nursing, Ryerson University.

**Dr. Allan Peterkin**, MD FRCPC(C) FCFP Assoc Prof, Psychiatry and Fam Medicine, U of T; Coord, Narrative Medicine & Humanities Prog, Mt Sinai Hosp;

**Dr. Larry M. Picard**, MD, FRCPC(C). Clinical Neurologist, Wasser Pain Management Centre, Mount Sinai Hospital.

**Rebecca Renwick**, PhD. Professor, Department of Occupational Science and Occupational Therapy; Director of the Quality of Life Research Unit

**Larry E. Roberts**, PhD. Professor in the Department of Psychology, Neuroscience, and Behaviour at McMaster University.

**Mark Rosenberg**, PhD. Prof of Geography, Prof of Community Health and Epidemiology, Canada Res Chair in Development Studies, Queen's Univ

**Bernard Ross**, PhD. Senior Scientist at Rotman Research Institute, Baycrest Centre and Associate Professor in the Department of Medical Biophysics.

**Frank Russo**, PhD. Associate Professor, Department of Psychology, Ryerson University; Director, Science of Music, Auditory Research and Tech Lab.

**Glenn Schellenberg**, PhD. Professor, Department of Psychology, University of Toronto. Director, Music & Cognition Laboratory, UTM

**Mark Schmuckler**, PhD. Prof, Dept of Psychology, University of Toronto; Director, Laboratory for Infant Studies; Director, Music Cognition Lab, UTS.

**Michael Schutz**, PhD Assist Prof of Music, McMaster Univ; Dir, MAPLE (Music, Acoustics, Perception, and LEarning) Lab. Core member, MIMM;

**Sandra Trehub**, PhD. Professor Emeritus, Department of Psychology, University of Toronto; Director, Auditory Development Laboratory, UTM

**Lidan You**, PhD. Assistant Professor, Department of Mechanical and Industrial Engineering, University of Toronto.