MaHRC On the MaHRC
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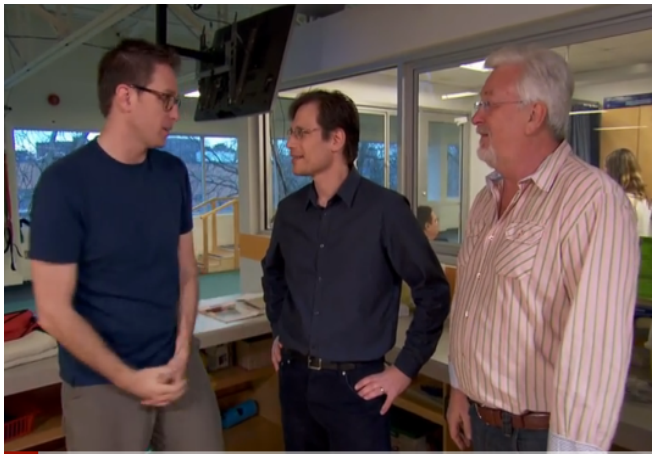
Faculty of Music
University of Toronto

Sphere: Sound & Health in Therapy and Medicine

Cardio Study on Daily Planet

On April 2, the Daily Planet show with Dan Riskin on Discovery Channel focused on a study being conducted by MaHRC Associate Dr. David Alter and Lee Bartel. The study formally entitled, "Physiologic-sensing music assistive devices for exercise self-management adherence and cardiovascular health," is a step toward the development of an electronic device than can sense physiologic data from an exercising person and modify selected musical material to drive specific neurologic dimensions to assist in the exercise outcomes.



This study is being conducted in several stages beginning with an experiment with cardiac rehab patients who are at risk of failure. Three groups were established – one control, one where patients self-select a music playlist and we arrange it into a suitable workout keeping tempo as a variable, and one where we modify the music in their selected playlist with the addition of stronger entrainment pulses aligned with gait. A variety of indicators including physiological ones like VO2 Max have been employed. We are now completing the final focus group qualitative stage. We have done some early analysis and results are encouraging. The study is funded by Ontario Centres of Excellence.
http://watch.discoverychannel.ca/clip897458#clip897458

Dr. Michael Thaut Lecture: "The clinical neuroscience of music: how research translates into therapy"

On May 15, 2013 Dr. Michael Thaut will present a talk titled "The clinical neuroscience of music: how research translates into therapy" in the Doctors' Lounge Series of the Ontario Medical Association sponsored by MaHRC. Dr. Thaut is Professor of Music and Neuroscience at Colorado State University has served as Administrative Director of the School of the Arts from 2001 to 2010 and has been the Director of the Center for Biomedical Research in Music since 1994.

There are only a few spaces left so only MaHRC members are invited by RSVP to music.research@utoronto.ca

NMT at MaHRC in May Fully Registered

Neurologic Music Therapy (NMT) is defined as the therapeutic application of music to cognitive, sensory, and motor function due to neurologic disease of the human nervous system. Neurologic Music Therapy is research-based. Its treatment techniques are based on the scientific knowledge in music perception and production and the effects thereof on nonmusical brain and behavior functions. Populations served by Neurologic Music Therapists include, but are not limited to: stroke, traumatic brain injury, Parkinson's and Huntington's disease, cerebral palsy, Alzheimer's disease, autism, and other neurological diseases affecting cognition, movement, and communication (e.g., MS, Muscular Dystrophy, etc).

A four-day training course in NMT is being held at MaHRC from June 16 – 19 and is fully registered with 30 therapists from across Canada. Upon successful completion of this course and a written test, a certificate of completion in advanced Neurologic Music Therapy training will be issued by the Robert F. Unkefer Academy for Neurologic Music Therapy. Completion of the NMT training allows the board-certified music therapist to practice and use the credential of Neurologic Music Therapist (NMT) for three years.

The training course is being conducted by Dr. Michael Thaut and Corene Thaut from Colorado State University. Dr. Amy Clements-Cortes, MaHRC Associate, has organized the course.

3rd International Conference of the International Association for Music & Medicine June 24-27, 2014 -- Dinner Speaker Announced

In addition to the keynote speakers, Dr Laurel Trainor, Dr. Julian Thayer, and Dr Alicia Ann Clair previously introduced in the February issue of *On the MaHRC,* IAMM 2014 is very pleased to present as Conference Dinner Speaker, Dr. Norman Doidge, author of *The Brain that Changes Itself,* chosen by the Dana Brain Foundation USA, from among the 30,000 books on the brain as #1 best general book on the brain.

Norman Doidge, MD., is a psychiatrist, psychoanalyst, researcher, author, essayist, and poet. He is on faculty at the University of Toronto's Department of Psychiatry, and Research Faculty at Columbia University's Center for Psychoanalytic Training and Research, in New York.

Dr. Doidge served as Head of the Psychotherapy Centre and the Assessment Clinic at the Clarke Institute of Psychiatry, and taught in the departments of Philosophy, Political Science, Law, and Psychiatry at the University of Toronto. He has published on trauma, problems in love, psychiatric diagnoses and intensive psychotherapies, and is the author of standards and guidelines for the practice of intensive psychotherapy that are widely used in Canada.

Dr. Doidge has won a number of scientific awards, including the U.S. National Psychiatric Endowment Award in Psychiatry; the American Psychoanalytic Association's CORST Prize in Psychoanalysis and Culture; the Canadian Psychoanalytic Association's M. Prados Prize; and election to the American College of Psychoanalysts for "many outstanding achievements in psychiatry and psychoanalysis… and national leadership in psychiatry." He was recently awarded the Mary S. Sigourney Prize, the highest award in international psychoanalysis, and the National Association of Mental Illness Ken Book Award.

He has written over 170 articles, both scientific and popular.

For more information on Dr. Norman Doidge please see:
http://www.normandoidge.com/normandoidge.com/ABOUT_THE_AUTHOR.html

IAMM 3rd International Conference 2014 - Call for Papers

For the call for papers and general conference information, please see
http://www.iammcanada.com/call-for-papers/

Article in Hospital News about Music Care

This article refers strongly to the music therapy work of Amy Clements-Cortes at Baycrest,
http://www.hospitalnews.com/music-care-at-end-of-life-brings-many-benefits/

Music Care Conference 2013

Speakers for the Music Care Conference, November 9, 2013 have now been confirmed. The full-day Saturday Care Conference is intended for doctors, nurses, social workers, religious workers, family care givers, long term care workers and many others interested in learning more about the potential and practice of using music in the context of care. The conference this year is surrounded with symposia on Friday and Sunday intended to provide opportunity for greater depth in the research on music medicine in care. For more information please click on the link.

http://musiccareconference.ca/speaker-information/

Sphere: Sound & Health in Body Brain and Mind

Father of Modern Neuroscience, Dr. Rodolfo Llinas, Presents Four Talks on ThalmoCortical Dysrhythmia

Between April 2 and 4, Dr. Rodolfo Llinas, MD, PhD., Professor of Neuroscience and Chairman of the Department of Physiology and Neuroscience at New York University School of Medicine, presented a series of talks at Mount Sinai and Baycrest on thalmocortical dysrhythmias and the related conditions. The reason for MaHRC interest and sponsorship of the talks is the premise that rhythmic sensory stimulation (music) may be able reset or regulate these dysrhythmias and consequently play a therapeutic role related to the affected conditions.

The talk “Thalmocortical Dysrhythmia and Pain" on Tuesday April 2 at Mount Sinai was well attended by a mixture of students, clinicians, and neuroscientists. Recent MaHRC research on fibromyalgia shows considerable potential for a treatment effect related to pain from rhythmic sensory stimulation with targeted sound.

On Wednesday April 3 Dr Llinas presented “Evidence for Thalmocortical Dysrhythmia and its Association with Health Conditions” at the Baycrest Centre. This session was a Collaborative Program In Neuroscience Distinguished Lecture and drew an audience of some 80 people of which about half were students in the CPIN program. It included an hour presentation by Dr Llinas followed by short related research presentations by Baycrest researchers and opportunity for discussion particularly related to TCD and neurodegenerative conditions.

Thursday April 4 saw two sessions presented at Mount Sinai: "Thalmocortical Dysrhythmia and Psychiatric Conditions" at noon and in the afternoon, "Thalmocortical Dysrhythmia and Hearing." Evidence was presented that depression and schizophrenia reveal a thalmocortical dysrhythmia (TCD). Present treatment of conditions implicated in TCD may now involve deep brain stimulation.

This series of lectures was part of MaHRC’s effort to redevelop an application to the Connaught Global Challenge Competition and was funded by the University of Toronto Connaught Fund.

Music Visualization Workshop, May 31, 2013

This Workshop on Friday May 31, 9:00 am – 4:30 pm is held in conjunction with the American Synesthesia Association Conference in Boyd Neel Room, Faculty of Music.

The full day workshop will engage participants in the creation of visual responses to selected pieces of music. This collaboration between the CRSC, OCAD University, MaHRC, the ASA, and The Gryphon Trio, will involve invited musicians, artists, designers, synesthesia researchers, and synesthete and non-synesthetes. Workshop participants will use both analog and digital media (e.g. drawing/painting materials, computers or tablets) to generate immediate responses to compositions by synesthete and non-synesthete composers, played by The Gryphon Trio.
The workshop will be punctuated by lectures and discussions by leading researchers on sound-colour synesthesia.

Schedule Highlights:

9:15-10:00 Jamie Ward: *Visualising Music in Synaesthesia and Sensory Substitution Technology*

10:00-10:20 Adam Tindale: *New Software for Documenting Visual Responses to Music*
10:40-12:00 Session 1: Visualizing Music
1:00-1:20 Constantine Caravassilis: *The Role of Synaesthesia as a Propelling Power in my Creative Output*
1:20-1:40 Mark Nerenberg: *Transcribing Sound into Colour: Interpreting Messiaen's Synesthetic Mappings*
1:40-2:45 Session 2: Visualizing Music
3:00-3:20 Carol Steen: *Seeing the World Differently*
3:20-3:40 Greta Berman: *Evidence from the Mountaintop: Musicians & Synesthesia*

Limited participation is available for the general public. Please contact rkingsburgh@faculty.ocadu.ca for more details.

Sphere: Sound & Health in Teaching, Learning, and Performing

MusicEAR Software Redesign

The computer company, Liquid Design, took on the reprogramming of MusicEAR last July and is now nearing completion of the project. Plans are now fully in place with subject participants recruited to begin the first pilot study of the retraining function of the software designed to rehabilitate music cognition to the point that people with cochlear implants can again enjoy music. Previous studies of the diagnostic functions of the software have shown strong reliability and utility in determining CI users music enjoyment-related ability. This study is conducted at Sunnybrook Hospital by MaHRC associates, Dr Joe Chen, Dr Lendra Friesen, and Lee Bartel.

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