

Dr. David Alter Leads Team Receiving Heart & Stroke Funding for Study on Music and Cardiac Rehabilitation

Dr. David Alter, MD, PhD, FRCPC, Cardiologist, Senior Scientist in the Institute for Clinical Evaluative Sciences, and Associate of MaHRC is the Principal Investigator leading a ten-member team in a study entitled, “The Efficacy of Personalized Audio-Playlists with Rhythmic Auditory Stimulation on Exercise Adherence in Cardiac Rehabilitation.” Dr. Alter and team applied for funding for this study to the Heart & Stroke Foundation and have received \$218,000 to commence this stage of a larger on-going project. The first step in this study took place in 2012-13 with funding from Ontario Centres of Excellence. Application for funding for the third stage has gone to CIHR.

Co-applicants on the Heart & Stroke Grant

Lee Bartel, University of Toronto, Music

Guy Faulkner, University of Toronto, Faculty of Kinesiology & Physical Ed

Jack Goodman, University of Toronto, Faculty of Kinesiology & Physical Ed

Jessica Grahm, University of Western Ontario

Susan Marzolini, Toronto Rehabilitation Institute

Paul Oh, Toronto Rehabilitation Institute

Donald Redelmeier, Sunnybrook Health Sciences

Therese Stukel, Institute for Clinical Evaluative Sciences

Laurel Trainor, McMaster University

Objective of the study: To examine the effects of personalized music audio-playlists enhanced with rhythmic sound modifications on exercise behaviours.

How will we undertake our work? We will undertake a randomized clinical trial design involving cardiac rehabilitation patients. All patients will receive cardiac rehabilitation (a structured exercise and lifestyle program for patients recovering from heart disease) as a minimum standard of care. The treatment difference between randomly assigned groups in this double blind study will be in the specific acoustic nature of the music to which the groups listen. Patients, research assistants, research technicians, and research analysts will all be blinded to (i.e., unaware of) which intervention or treatment patients actually receive. The study will be conducted over 3 years, and will incorporate the Toronto Rehabilitation Institute-University Health Network (where patients will be recruited and where exercise and lifestyle modification

will be provided), the Faculty of Music, University of Toronto (where personalized playlists and rhythmic methodology will be created and implemented), and the Institute for Clinical Evaluative Sciences (where data analyses will be performed).

What is unique about this project? Our current study builds on our previous research theme in which personalized music audio-playlists are coupled with embedded rhythmic stimuli (RAS) to enhance physical activity behaviours through the facilitation of tempo-pace synchrony (i.e., matching music-tempo and exercise-pace). This novel program of multidisciplinary research explores the use of music as a motivator and as an exercise-pace-regulator to improve physical activity behaviours. The program of research has created intellectual property, and has already demonstrated feasibility and proof-of-concept based on our previous work. Our rigorous methodology will allow us to better understand the incremental benefits of our intervention over and beyond the gold standard usual-care of cardiac rehabilitation.

UPCOMING EVENTS

NICU Music Therapy Training

Saturday May 30, 2015

9:00 am – 5:00 pm.

Faculty of Music, University of Toronto

To Register go to: <http://mahrc.snappages.com/home.htm>

This instructional conference is open to music therapists, students in music and health related programs, allied health care professionals, nurses, doctors, researchers, etc. Registration fees are \$250.00 Costs for this event are subsidized by the Music and Health Research Collaboratory.

For more information on this event or if you have any questions, please email Amy Clements Cortes a.clements.cortes@utoronto.ca

Topics

- First Sounds: Rhythm, Breath, and Lullaby
- EMT as a Noise Modulator: A Continuum of Care

Instructors:

- Joanne Loewy, DA, LCAT, MT-BC Director, The Louis Armstrong Center for Music & Medicine, Mount Sinai Beth Israel; Associate Professor, Icahn School of Medicine at Mount Sinai, Mount Sinai Health; MaHRC International Advisory Council Member.
- Andrew Rossetti MMT, MT-BC The Louis Armstrong Center for Music & Medicine, Mount Sinai Beth Israel The Louis & Lucille Armstrong Music Therapy Program for inpatients

Webinar Series by Room217 Foundation, a MaHRC Affiliate

Room 217 organizes a webinar series that features topics relevant to Music Care. These are free webinars and are available for participation as they are offered and for free download after the event.

May 13 Singing for Wellness - Melanie Boyd
June 10 Music & Parkinson's Disease - Dr. Bin Hu

To register for these or to download past webinars please go to:
<http://www.room217.ca/music-care-webinars>

Art Heals Health Heals Art

October 28, 2015 8:00 am – 5pm
Daniels Spectrum Centre
585 Dundas St. East

Art Heals Health | Health Heals Art is a symposium to celebrate the extraordinary work being done at the intersection of the arts and health care. From Theatre, to Visual Arts, Music and Dance, the Arts provide modalities for healing; physically, mentally, emotionally and spiritually. Art Heals Health | Health Heals Art is an annual, experiential one-day event that will bring together patients, practitioners and artists to create a community for exchange.



The Al & Malka Green
Artists' Health Centre



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WRITERBALLSTREETDANCEINTELLIGENTMAKER
NATUREDANCEARTTOUCH
CHOREOGRAPHERMUSICIAN
SHIATSUJOURNALIST
COMPOSERFILMMAKER
NURSEPHYSICIAN
DANCEARTIST
CONDITIONINGHEALTHCOUNSELLINGHEAL
ACTORSINGERARTISTPERFORMERCOMEDIAN
PHYSIOTHERAPYCHIROPRACTORMASSAGE
Keeping Artists Creating Art

For more information:

<http://www.arthealshealth.uhnopenlab.ca/index.html>

Toronto Area Music Care Conference - 2015



Save the Date: November 7, 2015

Location: Mississauga Living Arts Centre,

Featured Speaker: Allison Woyiwada (see book info below)

For more information see:

<http://www.room217.ca/music-care-conference-2015-coming-soon>

NOTEWORTHY IN BOOKS AND MEDIA

“Allison’s Brain”

Allison, a retired music teacher and lifelong musician, was advised in 2011 that she had a "giant" brain aneurysm, after experiencing olfactory hallucinations. In a twelve hour operation the aneurysm was "clipped." Following surgery Allison had severe cognitive and physical deficits. This is the story of Allison's remarkable recovery that was enabled by neurologic music therapy.

The Canadian Broadcasting Corporation's (CBC) signature broadcast, Ideas, featured the story of Allison's Brain on Thursday, February 19, 2015.

Listen to the Podcast:

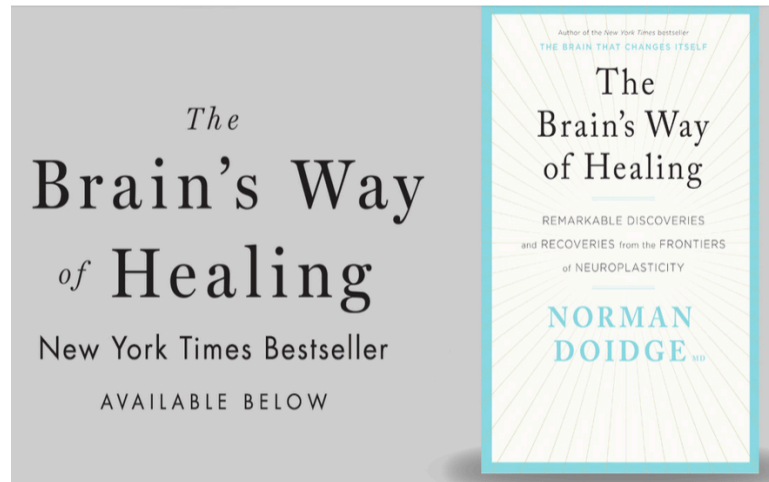
http://www.cbc.ca/radio_template_2012/audiopop.html?autoPlay=true&clipIds=2654742346



“The Brain’s Way of Healing” by MaHRC Associate, Dr. Norman Doidge

Now a New York Times
Bestseller!

In his first book, *The Brain That Changes Itself*, Dr. Norman Doidge introduced readers to the most important change in our understanding of the brain since the beginning of modern science: the discovery that the brain can change its own structure and function in response to mental experience—the phenomenon of neuroplasticity. Now his new book, *The Brain’s Way of Healing*, shows how the process of neuroplastic healing really works.



For centuries it was believed that the price we paid for our brain’s complexity was that, compared with other organs, it was fixed and un-regenerative—unable to recover mental abilities lost because of damage or disease. *The Brain’s Way of Healing* turns that belief on its head, as Doidge explains how the brain’s capacities are highly dynamic, and how its very sophistication makes possible a unique and gentle kind of healing. He describes natural, non-invasive avenues into the brain provided by the forms of energy around us—light, sound, vibration, movement—that can pass through our senses and our bodies to awaken the plastic brain’s own transformative capacities without surgery or medication and their unpleasant side effects or risks.

Using this more nuanced understanding of how our brains work, scientists and practitioners have learned how to use neuroplastic therapies to address many common conditions and to offer hope where prospects for healing were long denied. We see patients in whom years of chronic pain have been alleviated, and others who have recovered the ability not just to walk or talk but to live fully despite debilitating strokes, as well as cases of long-standing brain injuries cured or vastly improved. We meet children on the autistic spectrum or with learning disorders or attention deficit disorder who have used neuroplastic techniques to achieve normal lives, and sufferers who have seen symptoms of multiple sclerosis, Parkinson’s disease, and cerebral palsy radically diminished. And we learn how to vastly reduce the risk of dementia, or improve the brain’s performance and health, with simple approaches anyone can use.

The Brain’s Way of Healing includes a chapter with a detailed examination, illustrative stories, and proposed explanations for the role of sound in the sometime controversial Tomatis Method.

[text adapted from author’s website]

Focal Dystonia and MaHRC Associate Dr. Joaquin Farias – Clinical Example of Neural Plasticity

On March 7, The Globe and Mail published an article entitled, “Using the Brain to Retrain the Body to Overcome Dystonia.” It recounts the story of Federico Bitti who suffers from dystonia, a disease that affects a person's ability to control their muscles. He is trying a new therapy involving neuroplasticity, and specific exercises to retrain the brain (which for Mr. Bitti, includes dance). The therapist is noted clinician Dr. Joaquin



Farias, who moved to Toronto from Spain last summer and has set up a practice here. Dr. Farias is a Research Associate of MaHRC and presented a lecture on focal dystonia at the Music and Health Colloquium on November 5. The video showing Dr. Farias giving therapy to Federico went viral with over a million hits within a week.

To read the Globe and Mail article:

<http://www.theglobeandmail.com/life/health-and-fitness/health/using-the-brain-to-retrain-the-body-to-overcome-dystonia/article23342529/>

To view the Globe and Mail video on YouTube:

https://www.youtube.com/watch?v=IpcXkV_ex8Y

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