

McGill REPORTER

APRIL 13, 2006 - VOLUME 38 NUMBER 15

[Smaller](#) [Larger](#) [Email this page](#) [Print](#) [Help](#)
[Home](#) > [Public and media](#) > [McGill Reporter](#) > [Volume 38: 2005-2006](#) > [April 13, 2006](#) > [Plugged into Mozart](#)

April 13, 2006
Plugged into Mozart
Guardians of the past
McGill Headliners: Business, betrothals and beer
P.O.V.: Giving your all
Profile: Martin Raymond
Leaves from tea and books
Browsing the ARTstor
Entre Nous with Ann Dowsett Johnston
Space, funding and future dominate Town Hall at Mac
Three voices of genocide
Science and socializing
Out of Africa
Special feature: Hitting the right notes
Inuit bring northern warmth to School of Social Work
Flu beyond the coop
Around campus
March 30, 2006
March 16, 2006
March 2, 2006
February 9, 2006
January 26, 2006
January 12, 2006
December 8, 2005
November 24, 2005
November 10, 2005
October 27, 2005
October 6, 2005
September 22, 2005
September 8, 2005
August 25, 2005
Volume 37: 2004-2005
Volume 36: 2003-2004
Volume 35: 2002-2003
Volume 34: 2001-2002
Volume 33: 2000-2001
Volume 32: 1999-2000
Volume 31: 1998-1999

Plugged into Mozart

CIRMMT research looks to unlock the mysteries of music



Keith Lockhart shows off his body sensor wiring in a pre-concert photo op.

MIRO VINTONIV

fitted with a skintight vest equipped with sensors that monitored his every heartbeat and muscle twitch. Five members of the orchestra were similarly decked out, while some 50 volunteers — both adults and children — in the audience were hooked to simple sensors.

Although the high-tech gear was recording a variety of physical responses, researchers hope that once the collected data is analyzed, they will have a window on what goes on inside the heads of musicians and audience members during a concert. "The ability to study a performing musician's brain is somewhat limited because you have to lie perfectly still during an MRI," explains Daniel Levitin, a cognitive neuroscientist at the department of psychology. "But the brain controls your galvanic skin response — your pulse, the amount you sweat, the things that have been shown to be correlated with different emotional states. It's like a mechanic who can tell you what is wrong with your car's engine just by listening to it."

The study should shed light on several questions, including how successfully a conductor transmits the emotions he feels during a performance to the musicians he is leading. Similarly, does listening to a piece of music elicit feelings within audience members that correspond to those felt by performers? Is the experience diminished or heightened as it moves from baton to bassoon to balcony to back row?

A second part of the study, in which a test group in Montreal will be monitored as they watch a recording of the same concert, will rate similarities and differences in emotional responses among listeners of live versus recorded concerts.

Levitin and Stephen McAdams, director of McGill's Centre for Interdisciplinary Research in Music Media and Technology, hypothesize that whatever "emotional fingerprint" was registered by Lockhart during the climax of the Overture to the Marriage of Figaro was echoed a split second later by musicians and again by listeners. "Musicians often wonder if the audience shares what they are feeling inside when

NEALE MCDEVITT | When Keith Lockhart, the boyishly charismatic conductor of the famous Boston Pops, strode to the podium on April 8 as part of the Boston Symphony Orchestra's family concert series, he was wired: Wired for sound.

As part of a McGill study to measure the effects of music on the human brain, Lockhart was

Search

[Maps and directories](#)
[Downtown campus](#)
[Macdonald campus](#)
[Staff directory](#)
[Student directory](#)
[Unit directory](#)
[Community calendar](#)
[See all McGill events](#)

Volume 30: 1997-1998
Volume 29: 1996-1997
Volume 28: 1995-1996
Contact us
Policies
Ad rates and production schedule

they are playing," says Levitin, himself a saxophone player. "This might help answer that question."

Aside from a pesky sensor that popped off Lockhart's wrist during one Mozart piece, the trial went off without a hitch. Pre-event interest was so high that by concert time the gallery included a gaggle of media types, including network camera crews and a reporter from Associated Press. Ever the showman, Lockhart turned to address the crowd, saying this kind of work is important because "it will allow us to get a better understanding of the most important musical instrument of all; the human brain."

Next: [Guardians of the past](#)

McGill Reporter [[Unit detail](#)]

Burnside Hall [[Map](#)], Room 110, 805 Sherbrooke Street West, Montreal, Quebec H3A 2K6

Tel.: 514-398-5668 | Fax: 514-398-7364 | [[Email](#)]

Copyright 2006 McGill University - Last modified: 2006-04-13 08:07:28