

The chance to get inside the head of a musician

Hamilton Spectator

Green room, control room, sound booth.

Check.

Subject preparation room, signal processing room, tech room.

Check.

Disklavier grand piano, motion capture camera and video screen, multi-person dense array EEG.

Check.

All systems are go for Friday's "sneak peek" concert at the McMaster Institute for Music & the Mind's 100-seat LIVE (Large Interactive Virtual Environment) Lab on the second floor of the university's psychology building, 1280 Main St. W.

By invitation only, the concert is a "naming your seat" fundraiser (\$5,000 per seat, ladies and gentlemen, pledged over five years if you so desire) in support of the groundbreaking neuroscience research that will be conducted at McMaster's unique LIVE Lab which was constructed through the help of several grants totalling \$8 million.

The concert will spotlight the Toronto-based Afiara String Quartet, just back from a European tour with scratch DJ Kid Koala, performing selected movements from string quartets by Beethoven, Schumann, Mozart, and Golijov. As MIMM research assistant and communications associate Janice Shearer explained, each of the movements will be used to demonstrate the LIVE Lab's research capabilities.

For example, during the Adagio of Schumann's String Quartet op. 41 no. 1, the cellist and the first violinist will wear EEG caps and their brain waves and heart rate will be viewed on the video wall.

But the LIVE Lab isn't just about the novelty of watching performers and their brains in action thanks to the state-of-the-art research/performance hall, the acoustics of which can be manipulated via 28 microphones, a system of processors and mixers plus 71 loudspeakers all on separate channels to mimic anything from a reverberant cathedral to a noisy warehouse to a tiny, padded cell.

For Afiara cellist Adrian Fung, it's about understanding how concerts are a two-way communication, a kind of wordless dialogue between performers and listeners.

"What fascinates me in particular is the capability of the lab to present a concert, and for the first 30-odd seats in the audience to be outfitted with the same equipment used to read our brain waves," wrote Fung in an email to The Spectator. "In the Afiara, we try to 'play the room' and match or alter the 'electricity' we feel coming back from the audience. We always see performance as a sort of dialogue with the listeners. With tablets on our stands reading the audience's brainwaves in real-time, we hope to fine-tune and evaluate how effectively we are communicating."

In addition to developing effective performance under differing acoustics, other research at the LIVE Lab will be directed toward treating hearing impairment and tinnitus, the use of musical training in autism and Down syndrome, improving movement in Parkinson's disease, and a host of other areas.

However, none of the above comes for free. According to MIMM founding director Dr. Laurel Trainor, she's dealing with an annual budget of approximately \$400,000.

"We need to recover that," said Trainor. "We have a business plan which includes grants from researchers, but also companies to come in and rent the space. The more donations we get, the less we have to charge."

So, the MIMM is also running a "window note sponsor" campaign. And here's the rundown on that. Each of the 36 windows along the facade of the psychology building will be represented by a note from two well-known pieces of music. With each window that is sponsored (\$300 per window) one note will be uncovered. The goal is to uncover all of the notes and have both songs played in the LIVE Lab's lobby by Russ Weil and his Hamilton All Star Jazz Band at the free, open house on Saturday, Sept. 27 from noon until 3 p.m.

In addition to Weil's All Stars, the open house will also feature several concerts at which one or more of the LIVE Lab's capabilities will be demonstrated. Catherine Wilson and Ensemble Vivant have been assigned the noon to 12:50 p.m. time slot. From 1:15 until 1:45 p.m., Janet Lopinski from the Royal Conservatory of Music in Toronto will demonstrate a remote



The Afiara Qtet will really let the audience inside their music at Friday's sneak peek concert at the McMaster Institute for Music & the Mind.

piano lesson on the disklavier. From 2:15 until 2:45 p.m., Rachel Rensink-Hoff will conduct her McMaster University Choir. That evening, two by-invitation-only concerts will feature, among other musicians, the Hamilton Philharmonic Orchestra's concertmaster Stephen Sitarski.

It must be noted that while some of the above performers will be wearing EEG caps, there are no plans for any audience member at any of these performances to be similarly outfitted. However, the MIMM is in the process of constructing a database of potential audience members who could be used for certain situations. For more info, log on to mimm.mcmaster.ca, or call Janice Shearer at 905-525-9140 ext. 25483.

Sunday at 4 p.m., Bud Roach's monthly Early Music series, Hammer Baroque, premières in the Church of St. John the Evangelist, 320 Charlton St. W., with guests Elixir Baroque from Toronto. Suggested donation: \$15.

The Dundas Valley Orchestra is seeking new members for its string, brass, wind, and percussion sections. Rehearsals are Tuesdays from 7:30 to 9:45 p.m. starting Sept. 9. Contact music director Laura Thomas at lthomas557@yahoo.com.

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