## In Concert: McGill Bicentennial Performance Stage & Pavilion Architecture, technology, and sound arts



### **General description**

The McGill Schools of Architecture and Music (Facility for Architectural Media and Mediation (FARMM) and the Centre for Interdisciplinary Research in Music Media and Technology (CIRMMT)) are teaming up in a unique collaboration between architects, musicians, music technologists, and engineers to design and build a music pavilion for the lower campus. The McGill Bicentennial Stage and Pavilion (BSP) has been approved by the University as one of three major student and faculty driven projects in celebration of McGill University's 200<sup>th</sup> anniversary (2020).

The objective is to design and build a pavilion structure on the lower campus that has multimedia (sound, projection, lighting) infrastructure embedded in its design to support a range of performances and artistic content for collective, immersive and interactive sound and media experiences. The pavilion will be a nexus for social gathering and interaction between the university community and general public as a McGill University contribution to the urban commons. It will be a prominent unique gathering place attracting the public to the campus.

Additionally, specific musical and artistic content will be created in concert with the design and construction of the architecture and technological infrastructure (this will form a longer-term initiative between the Schools and partners). Musicians, artists, architects, and technologists will work together to create a technological "playground" (both hardware and software) that will host creative works and content. The electrified technological components (loudspeakers, microphones, and sensors) will be designed and embedded in the architecture. The project will allow the creation of a unique platform that will foster immersive/interactive artistic content including but not limited to:

- Live music performances (any types or genres of music, from classical to modern or pop and jazz music);
- Theater, dance or circus performances;
- Standalone art installations with pre-recorded audio and/or interactions between the audience and the artistic content and/or the performers;
- Interactive installations with educational content or 'edutainment' (such as a spatial audio tour of McGill campus highlighting significant historic moments or an audio reconstructions of historical soundscapes).

#### **Coursework/Workshops**

The project will be designed in the winter 2019 term in a Selected Topics or Directed Research course including students and faculty from the Schools of Architecture and Music. The pavilion will be physically built/prototyped in the summer 2019 term (ARCH514: Community Design Workshop, May-June timeframe, TBD) at the Jardins du Métis/Reford Gardens near Rimouski, QC (<u>http://www.refordgardens.com/</u>) as part of an inaugural design-build initiative. It will be built primarily in wood and must be capable of being assembled, disassembled, stored, and reassembled over the years.

Precedent studies have been accomplished and will be expanded with additional research through the winter term course. Digital design, evaluation, and fabrication techniques will be employed. The pavilion will need to be extensively modeled, virtually and physically. Acoustic principles will be discussed relative to form, material properties, electric amplification, etc. Further evaluations concerning the impact upon the overall sound environment using acoustical and psycho-acoustical indicators will be pursued. A sound/noise "coverage" of the installation will be assessed and evaluated.

We are looking for interested students to participate in this extraordinary initiative. Construction and/or practical experience in multimedia technologies are preferred but not required. Interviews will be conducted. It is highly desired that students are able to participate in and committed to both the winter and summer courses in order to ensure continuity.

#### Team

Architecture:

- Theodora Vardouli, Assistant Professor
- Kiel Moe, Gerald Sheff Professor in Architecture
- Michael Jemtrud, Associate Professor, FARMM Director
- Salmaan Craig, Assistant Professor

#### Music:

- Romain Dumoulin, Project Manager at CIRMMT
- Philippe-Aubert Gauthier and Florian Grond, Scientific and artistic advisors
- Isabelle Cossette, CIRMMT Director

# If you are interested in participating, please attend a 30-minute information session in Room 212, Macdonald-Harrington Building on 27 November at 13h30 (after GASA General Assembly).

[If you cannot make the introductory meeting please contact Prof. Jemtrud at: michael.jemtrud@mcgill.ca]