

Science with the Symphony

The Cognitive Aging and Auditory Research Lab is partnering with the Newfoundland Symphony Orchestra and MUN's School of Music to bring you Science with the Symphony, an exciting new research project where you will be creating scientific knowledge while enjoying a live orchestra concert!

About the Project

The CAANLab investigates the neuroscience of aging and hearing, where Dr. Sarah Sauvé is currently working on a series of studies about music perception in older listeners, something we generally know very little about. This study investigates memory for music. We're interested in understanding how learning a new musical theme in a brand new piece of music changes with age, if at all. Though memory tends to get worse with age, it's often restricted to learning new things - you probably don't have any problem singing favourite (or catchy) songs from your childhood or youth! That's why we're also going to investigate how the style of music affects learning by having two styles of experimental pieces: one tonal (like Mozart) and one non-tonal (like Schoenberg).

What will I do?

Three pieces during the concert will be a part of this study. Before each piece starts, the orchestra will play the main theme on its own so everyone can learn it. Then, during the piece, we're going to ask you to press the button on a clicker (little rectangular device with a button) whenever you hear that theme. Two of those pieces will be commissioned from students of the School of Music so that we can be sure they're brand new and no one's heard them before. The last one will be Holst's The Planets. We'll also have some questionnaires gathering demographic information, information on your musical background, social and physical activity and two short IQ tests. These will take about 5-10 minutes and can be done before or after the concert, or during intermission so please keep this in mind when planning your evening.

What do I get out of it?

You'll learn a little bit about how your brain interprets sound when Dr. Sauvé speaks about music perception during the concert and you'll be a part of creating new scientific knowledge while enjoying a live orchestra performance by the NSO! You will also have the option of entering into a prize draw for one of ten \$25 cash prizes (Visa).

What happens to my information?

The confidentiality of your data is important to us. All of your data will be anonymized, identifiable only by a participant code (it will not contain your date of birth or initials). Your data will be stored in a locked cabinet in the CAANLab space (for paper-based data)

and a password-protected lab Sync account (<https://www.sync.com/privacy> for more on Sync). Your **anonymized** data will also be uploaded to the [Open Science Framework](#), in line with Open Science practices.

How can I take part?

You can take part in this project by attending Masterworks III. Once there, you can approach the research team to let them know you'd like to take part! It's best to arrive 20-30 minutes early to make sure you have time to get some of the paperwork, including a [COVID-19 daily assessment tool](#), and get your clicker before the concert starts. You can also email Dr. Sarah Sauvé at sarah.sauve@mun.ca, which will help the team prepare ahead of the show.

Ethics statement

The proposal for this research has been reviewed by the Interdisciplinary Committee on Ethics in Human Research and found to be in compliance with Memorial University's ethics policy. If you have ethical concerns about the research, such as the way you have been treated or your rights as a participant, you may contact the Chairperson of the ICEHR at icehr@mun.ca or by telephone at 709-864-2861.

More information

You can direct any questions you might have to Dr. Sarah Sauvé at sarah.sauve@mun.ca.