

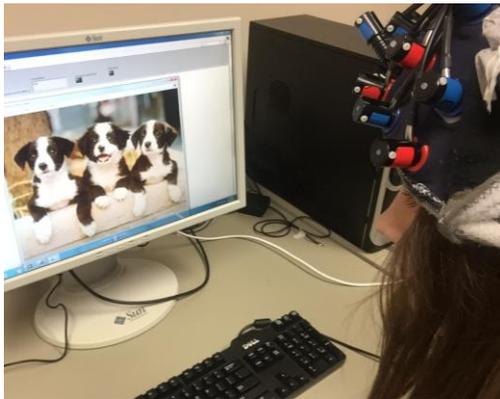
# Participate in Research!

Communicating through Emotions: *using near-infrared spectroscopy to identify emotional responses in children*



## Principal Investigator:

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## TO ASK QUESTIONS OR TO SIGN UP, CONTACT:

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## Do you want to help us develop a communication device for children with severe motor impairments?

Consider participating in our research study to test a device that can identify emotions from brain activity.

### What is this study about?

We are developing a device that can identify emotional responses in children from their brain activity, measured using near-infrared spectroscopy (NIRS). In the future, we hope that such a device could be used as a way for children with severe motor impairments to communicate.

### Who can participate?

We are looking for participants who:

- Are typically developing children aged 8-14.
- Have no known history of neurological, psychological, cardiopulmonary, respiratory, or drug and alcohol-related conditions, traumatic brain injury or concussion.
- Have no history of emotional trauma.
- Can read and understand English.
- Have normal or corrected-to-normal vision.

### What's involved?

- You will attend **up to 4, one-hour long sessions** at the Holland Bloorview Kids Rehabilitation Hospital. Both weekdays and weekends are possible.
- During each session you will look at sets of pictures while listening to music. These pictures and music clips will make you feel different emotions, such as happiness or sadness.
- While looking at the pictures and listening to the music, you will wear a head cap with sensors that will measure your brain activity when you experience these different emotions.

### What are the risks and benefits of participating?

There are no known risks of using NIRS to measure brain activity. You will receive a small token of appreciation to thank you for your time. With your help, we will be able to learn more about using NIRS to identify emotions in children. We may be able to use this in the future to develop a communication device for children with severe motor impairments.