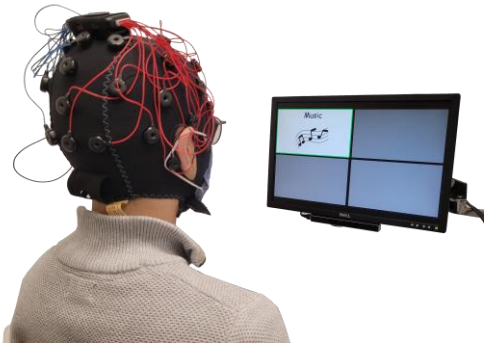
Participate in Research
BCI Communication System for Children with Disabilities

Principal Investigator:
Dr. Tom Chau

Centre for Leadership:
Innovations



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To ask questions or sign up, please contact:

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Does your child have complex communication needs?
Consider participating in a research study to evaluate a communication system that can be controlled with your mind!

What is this study about?
We are developing a brain-computer interface (BCI) that allows children with disabilities to communicate using only their brain activity. We want to evaluate the performance and usability of this new technology.

Who can participate?
We are looking for participants who:

- Are between 5 to 19 years old,
- Are nonverbal or have unclear or limited speech,
- Have difficulty physically pointing to pictures or pressing buttons with your fingers, hands, and/or feet,
- Can hold a steady gaze on a screen for 30 seconds to make a selection,
- Have a basic understanding of using AAC to communicate simple messages,
- Are able to reliably indicate yes / no.

What's involved?

- A 10-minute survey over a phone / Zoom meeting and up to five 90-minute sessions at Holland Bloorview.
- During each session, we will record your brain activity using an EEG headset. This headset has sensors that gently touch your head.
- We will track your eye position using a camera.
- You will train a BCI by looking at flashing buttons on a screen.
- You will use the BCI system to control a communication application.
- At the end of each session, we will ask you to fill a usability survey.

Potential Risks?
There are no known risks associated with EEG. You may experience discomfort, tiredness and/or frustration from study participation.

Potential Benefits?
You will not directly benefit from participating in this study. However, your participation will help us improve the design of the BCI communication system.

Participants will receive a **$30.00 gift card for each session.** Transit and parking fares up to a total of $5.50 will be reimbursed as well, if applicable.

Scan the QR code to learn more!

Bloorview RESEARCH INSTITUTE
Canada's Only Hospital-Based Childhood Disability Research Institute
Holland Bloorview Kids Rehabilitation Hospital