

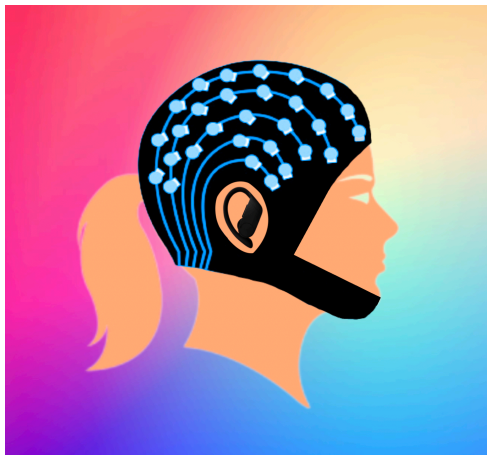
# Participate in Research

## In-ear EEG Device for Auditory Brain-Computer Interface Communication



**Principal Investigator:**  
Dr. Tom Chau

**Centre for Leadership:  
Innovation**



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

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**Do you want to help us develop a communication device for youth with severe motor and visual impairments?**  
Consider participating in our research study.

### What is this study about:

We are developing a portable technology that records brain activity using electroencephalography (EEG). In the future we hope that this technology can enable youth with severe motor and visual impairments to participate in conversation.

### Who can participate?

We are looking for participants who:

- Are between 13 and 18 years old
- Have normal or corrected-to-normal vision and hearing
- Are able to read, understand and speak English
- Have no known history of neurological, psychological, drug or alcohol-related conditions, seizures, or head injuries

### What's involved?

- You will attend 1 session, that is approximately 90 minutes long, at Holland Bloorview Kids Rehabilitation Hospital.
- You will be asked to perform motions with your head, listen and count cues, and complete a questionnaire.
- You will wear a cap with sensors that will measure your brain activity. We will put gel on your head under each sensor.
- You will wear sensors, that are worn like headphones in each ear, that will measure your brain activity.

### Potential Benefits?

- Your participation will help us develop a communication device for people with severe motor and visual impairments.

### Potential Risks?

- The cap may leave pressure marks on your scalp which will be gone within an hour. You will need to wash your hair to remove the gel.

Participants will receive a small token of appreciation to thank them for their time.

**REB#589**