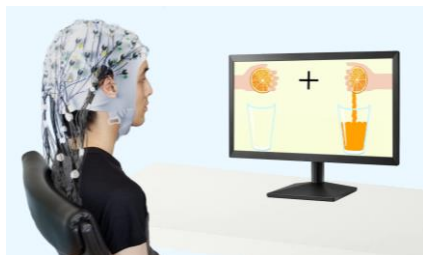


Participate in Research

BCI MENTOR: Testing new video game-based brain-computer interface user training methods



Can you learn to play computer games using only your thoughts?

Help us create a training protocol that allows people to control a computer using their brainwaves.

What is this study about:

We are developing technology and a training system that allows children with motor impairments to control a computer and play video games using only their brainwaves.

Who can participate?

We are looking participants (**aged 13-18**) who:

- Either: (i) Have a **spinal cord injury** OR (ii) are **typically developing** without spinal cord injury or neurological disorders
- Can wear an EEG cap that includes electrode tips and gel or saline solution that makes contact with the hair and scalp
- Have normal or corrected-to-normal vision and hearing
- Able to follow instructions in English and communicate to the researchers (non-verbal communication acceptable)
- Can keep their head and body still for about 10 minutes and tolerate being in an upright seated position for 1.5-2 hours
- Have not sustained a brain injury or concussion in the last six months and are not experiencing or receiving treatment for symptoms

What's involved?

- **Eight 2-hour sessions** at Holland Bloorview (flexible scheduling available)
- Perform mental imagery tasks like imagining a movement or picturing a face to control your brainwaves and play video games
- Wear an EEG headset that measures your brain activity. Gel or saline solution from the sensors and touch your head.

Potential Benefits?

Your participation will help us develop new technologies for kids with motor impairments and other disabilities

Potential Risks?

There are no known risks associated with EEG or the training

Token of Appreciation

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

Principal Investigator:
Dr. Tom Chau

Centre for Leadership:
Innovation

TO ASK QUESTIONS OR TO SIGN UP, CONTACT:

Nicolas Ivanov
PhD Candidate
PRISM Lab, Bloorview
Research Institute
Email:
nivanov@hollandbloorview.ca
Tel: (416) 425-6220 x3018

Date Posted:
eREB #: 697
Version date: Apr. 2,
2025