

Would your child/legal ward like to control a computer with their brain?

At the *University of Nebraska-Lincoln*, we are trying to learn about how people control computers with their brains, and how they like them to look. Brain activity involved in control of the braincomputer interfaces (BCIs) will be recorded by electroencephalography (EEG). This is a method which records brain waves via electrodes placed in a cap, similar to a swimming cap. The purpose of the study is to inform how brain-controlled computers can be designed and implemented. **Scan this QR code with your phone to see what helping in this study is like!**

Participant Requirements

- Between 8 to 12 years of age
- Typically developing <u>OR</u> a with diagnosis of cerebral palsy, or muscular dystrophy.
- Be without a) electronic implants (e.g., pacemaker or pumps),
 b) a history of seizures, and c) difficulties with color vision

Location: Barkley Center, University of Nebraska-Lincoln, East Campus



Tasks and Requirements:

- The study includes three sessions, lasting between approximately 60-90 minutes.
- Sessions 1 and 2 will include brain-computer control by the participant staring at pictures while they flash red. Session 3 will include use of an iPad application to evaluate best designs.
- Short assessments evaluating areas such as attention will also be collected.

This project has been approved by the University of Nebraska-Lincoln institutional review board.

*For more information contact: Dr Kevin Pitt at kevin.pitt@unl.edu or (402) 472-3846.

| Brain-computer study |
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| Email: kevin,pitt@unl.edu | Email: kevin.pitt@unl.edu |
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