

Non-invasive brain-computer interfaces for access to augmentative and alternative communication and cognitive assessment.

**Jane E. Huggins, Ph.D.**

*Associate Research Scientist, Physical Medicine and Rehabilitation*

*Assistant Research Scientist, Biomedical Engineering*

*Director, Direct Brain Interface Laboratory*

**University of Michigan**

Brain-computer interfaces (BCI) enable computer access for people who cannot move, but they are not widely used. BCIs generally have only simple communication interfaces. Augmentative and alternative communication (AAC) systems are widely used and give efficient and precise communication, but require movement, preventing use by people with severe impairments, such as advanced amyotrophic lateral sclerosis or severe cerebral palsy. Many tests of cognitive ability rely on accurate and precise movements or speech to generate results, creating a false dependence between movement and speech and perceived mental abilities. The University of Michigan Direct Brain Interface laboratory is investigating BCI for access to AAC devices and cognitive assessments with a primary goal of making BCIs practical for people who need them.



**Friday, April 29, 2022 12:00 p.m. – 1:00 p.m.**

**UT Austin campus, NHB 1.720, Zoom option also available**

**(Please be signed into your zoom account to join)**

<https://utexas.zoom.us/j/94426095929>

Contact CARE: [utcareinitiative@austin.utexas.edu](mailto:utcareinitiative@austin.utexas.edu)