

Research Study: EEG Neurofeedback Therapy for Chronic Stroke Rehabilitation: A Pilot Study

What is the purpose of this study?

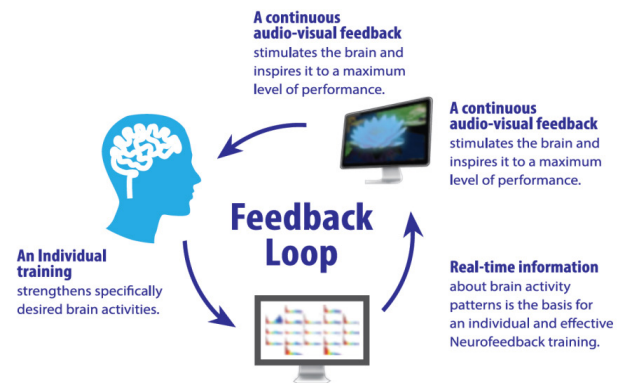
We will evaluate the efficacy of using electroencephalography (EEG) neurofeedback therapy to treat your post-stroke cognitive and motor symptoms and examine your brain changes associated with the intervention.

What is involved with participation in this study?

- ♦ Intervention: You will participate in a total of 30 sessions of neurofeedback therapy, separated into 3 sessions a week, for a duration of 40 minutes per session. During the neurofeedback sessions, you will be playing a game on a screen.
- ♦ Assessments: Before and after your intervention, your cognitive and motor abilities will be assessed (approximately 2 hours) and measurements of your brain will be taken with EEG and MRI (approximately 1.5 hours).
- ♦ Follow-up: Three months after the completion of your therapy, your cognitive and motor abilities will be assessed again. No images of your brain will be taken at this time point.

What is neurofeedback?

EEG neurofeedback is a non-invasive procedure (does not enter the body) that uses recording electrodes placed on the head to help individuals learn to self-regulate their brain activity through real-time feedback to enhance brain function.



Who is eligible to participate?

- ♦ Ages 18-69.
- ♦ Must be at least 6 months post stroke.
- ♦ Still experiencing cognitive (attention, memory, etc.) and/or motor problems.
- ♦ No concurrent rehabilitation intervention.
- ♦ Patients will be excluded if they have visual hemi-neglect, dementia, severe aphasia, or other concomitant neurological disorders (e.g. Parkinson disease; visual-reflex epilepsy).

For more information or to find out if you or your patient or family member qualifies, please contact Amy Zheng, PhD, Research Scientist, Casa Colina Research Institute, at 909/596-7733, ext. 2279 or 2283 or azheng@casacolina.org.

