

tDCS

What is it?

Transcranial direct current stimulation (tDCS) is a type of safe, non-invasive brain stimulation that delivers low level currents to your brain through your scalp.



Why use it?

Research has shown that 30 to 40% of older adults will fall each year, 10% of which will result in a serious injury. Being able to walk and stand, while dual-tasking, certainly decreases the risk of falling. tDCS has been shown to improve dual-task performance in older adults, ultimately resulting in fewer falls.

Questions?

Project Coordinators:

Kaliela Osha
(617)-971-5312
KalielaOsha@hsl.harvard.edu

Ali Ludington
(617)-971-5308
AlexaLudington@hsl.harvard.edu

Principal Investigator:

Brad Manor, PhD
BradManor@hsl.harvard.edu

The Brain Stimulation for Fallers Study

Hebrew Rehabilitation Center
1200 Centre St
Boston, MA 02131



Institute for
Aging Research
Hebrew SeniorLife



Affiliated with
Harvard Medical School

Have you fallen recently?

Are you over 65 years old?

You may be eligible to participate in our research study:

Brain Stimulation for Balance in Older Adults



You may be eligible if you...

- Are 65 years old and older
- Are able to speak, read, and write in English
- Have experienced 2 or more falls in the last 6 months

Compensation

Participation is paid, up to \$315 and parking is provided.

Study Visits

Visit 1: Screening

- Read over & sign Informed Consent
- Complete a cognitive assessment to determine eligibility
- Complete several questionnaires such as medical history, falls history, daily activities, etc.

Visit 2: Baseline Assessment

- Collect resting brain activity and body movements
- Dual-task assessments while sitting, standing, and walking

Visits 3-6: tDCS Stimulation Visits

- 20-minute session of tDCS each visit
- Complete a quick cognitive assessment & several dual-tasking assessments before and after the tDCS session

Intervention

The four tDCS visits will target a different area of the brain each time. These areas are:

- Primary motor area
- Cognitive processing area
- Both motor + cognitive processing area
- Sham

