“Our study intends to investigate changes of brain development in infants who had stroke around the time of birth. We will also observe these infants’ movements to understand how their brain function impacts development.”

- Chao-Ying Chen, PhD, PT (Post-Doctoral Fellow)

“Building on our past research, we intend to compare and contrast two existing methods currently in use for locating the specific area to place electrodes outside the head for transcranial direct current stimulation (tDCS). Using tDCS for brain stimulation, the brain cells that were inactive due to stroke have the potential to become active and contribute to overall function after stroke.”

- Maira Lixandrao, PhD student, PT

“Along with PhD student Tonya Rich, our doctorate of physical therapy students (Andrea Tobias, Stephanie Morse, Karen Myhrman, Shannon Groth, and Josa Martin, Kaitlyn Kubat, Tim Miller) developed a poster which was presented this February at the American Physical Therapy Association national meeting in Anaheim, CA. The study looked at two different ways to locate the part of your brain that controls the movement in your hand. Our team is the process of analyzing the results of this study. More information to come!”

- Dr. Bernadette Gillick
We participated in Dr. Gillick’s tDCS/CIMT research camp with our son who
has cerebral palsy caused by a stroke in utero. The study is providing
constraint therapy for 10 days, along with group randomization to either real or
placebo brain stimulation.

Attending the camp for our son was the best part of his day. He had such a
great time being with other kids going through what he experiences every day.
He enjoyed all of the activities each day, and the staff that had a great person-
ality to make each day new and fun. He really liked his therapist too!

It is an incredibly long time, and a huge commitment to families who don’t live
in the area, but I wouldn’t change a thing about our decision to do this. In the
10 years of our son’s life, it is the absolute first time I have felt we weren’t just a
number in the healthcare system. I cannot thank Dr. Gillick and staff
enough for having the desire to study strokes in children, and the
time you put into your work. We are forever grateful.”

–Mother of Study Participant

Brain Stimulation and
Hand Training Study:
z.umn.edu/tDCS