Addition.

Meet Members of the Research Team

Bernadette Gillick, PhD, MSPT, PT
Principal Investigator
Bernadette Gillick is an Assistant Professor in Physical Therapy at the University of Minnesota and a pediatric physical therapist. Her research interests are in cortical plasticity and recovery from neurologic insult.

Chao-Ying Chen, PhD, PT
Chao-Ying is a postdoctoral fellow with great interest in pediatric physical therapy. She received her PhD degree in Health and Rehabilitation Sciences program from the Ohio State University and is a physical therapist in Taiwan.

Additional Members of the Research Team

Michael Georgieff, MD
(Medical Director)
Raghavendra Rao, MD
(Medical Monitor)
Mo Chen, PhD
(Biomedical Engineer)
Jed Elison, PhD
(Infant Neuroimaging)
Bryan Mueller, PhD
(Biophysicist)
Kyle Rudser, PhD
(Biostatistician)
Jim Stinear, PhD
(Neuroscientist)

Funding

Infant Research Study

Understanding how the brain continues to develop after injury.

University of Minnesota
Driven to Discover™
Using pictures of the brain and magnetic pulses, we can see how the cells that control movement in a baby’s brain are connected.

Some babies experience brain injuries before or shortly after birth. These babies are at high risk of developing difficulties in movement due to changes in the brain. To provide treatment we first need to understand how the brain changes in infants who have had a brain injury.

The use of brain pictures and magnetic pulses have been studied in infants and also older children who had a brain injury around the time they were babies. The information gathered in these studies will help to build studies that focus on interventions and treatments with the goal to improve movement.

For this study, we will be taking a picture of your baby’s brain in the MRI, while your baby is sleeping.

After the MRI we will apply the magnetic pulses (TMS) with a paddle that rests on your baby’s head. You may hold your baby during the TMS.

In addition to the brain pictures and magnetic pulses, we will also analyze how your baby is moving with an assessment designed specifically for infants. We will share the information so you too can learn more about how your baby moves.

Families will receive $25 after the first visit and $75 after the second paid by Visa gift cards.

Contact study coordinator if interested in being a participant.
(612-624-3272)

Visit 1 (2 hours)
MRI (Brain Imaging)
U of MN
Ctr for Magnetic Resonance Research

Visit 2 (2 hours)
Magnetic Pulses and Movement Assessment
U of MN Clinical Translational Science Inst

Please call us to learn more about this study with no obligation to participate. We also invite you to visit our lab and meet the team!

Gillick Pediatric Laboratory
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