Some babies experience injury to the brain before or shortly after birth. These babies are at high risk of developing difficulties in movement due to changes in the brain. To develop better treatments we first need to understand how the brain changes in infants who have had an injury to the brain and how the brain develops over time.

FAQ

What is the Clinical Importance of This Study?

To determine how changes in the brain relate to sensorimotor development in children with perinatal stroke. Findings from this study may inform future therapies and treatment options for infants with brain injuries.

How Long is the Study?

The study consists of two 2-3 hour visits. The first visit includes an MRI imaging scan. The second visit includes movement/ sensory behavior testing and the TMS brain connectivity testing.

Is There a Cost to Participate?

No, there are no costs to participate. Families will receive a $100 payment card upon completion of their participation.

Where Does the Study Take Place?

Both visits will be on the University of Minnesota campus with free parking right outside of the facilities.

STUDY DIRECTORS

Bernadette Gillick, PhD, MSPT, PT
McKnight Land-Grant Professor
Lab Director

Michael Georgieff, MD
Director, Center for NeurobehavioralDevelopment
Medical Director

CONTACT

We invite you to contact us to learn more about this study with no obligation to participate.

We also offer tours of our lab and opportunities to meet our team.

Contact Daniel Lench, PhD: 612.597.2163
E-mail: lench002@umn.edu
Study Website: z.umn.edu/infant

For General Questions and Information
Phone: 612.626.6415
E-mail: brown029@umn.edu

FUNDING

University of Minnesota Driven to Discover℠ Health Sciences

MnDRIVE Discoveries and treatments for brain conditions

Maslowski Charitable Trust

National Institutes of Health

PHYSICAL THERAPY
UNIVERSITY OF MINNESOTA
Driven to Discover℠

INFANT RESEARCH

Learning how an infant's brain continues to develop after perinatal stroke/brain bleed

The Gillick Pediatric Neuromodulation Laboratory

Empowering Children for Life

MOVEMENT

Our team of therapists will analyze how your baby is moving and developing with assessments designed specifically for infants.

IMAGING

To understand brain development, we will take a picture of your baby's brain with an MRI, while your baby is naturally sleeping and under no sedation.

BRAIN CONNECTIVITY

We will apply brief and painless pulses with a device that gently rests on your baby's head that allows us to understand the activity in the area of your baby's brain that controls movement.

INCLUSION CRITERIA

Age: Infants 3-24 months;
History of perinatal stroke/brain bleed.
We welcome you to contact our team to help you determine eligibility and learn more about the study.
See back of brochure for contact information.

STUDY LOCATION 1

Center for Magnetic Resonance Research is where the MRI will take place and is located on the University of Minnesota campus.
(2021 Sixth St SE, Minneapolis, MN 55455)

STUDY LOCATION 2

Center for Neurobehavioral Development and Clinical and Translational Science Institute is where behavioral assessments and TMS will occur and is located on the University of Minnesota campus.
(717 Delaware St SE, Minneapolis, MN 55414)