GILLCICK PEDIATRIC RESEARCH LAB

Bernadette Gillick, PhD, MSPT, PT

OUR MISSION

We believe that all children with cerebral palsy have the potential to influence their level of function throughout their lifetime, applying the latest advances in neuroscience with rehabilitation.

Infant Stroke Update

We are continuing to recruit infants for our Infant Stroke and Brain Bleed study. This study was recently highlighted by KARE 11 News (the link to this story is available at z.umn.edu/gillicklab). The goal of this study is to understand how the brain continues to develop after early injury around birth. We will use brain pictures and magnetic pulses to examine how the brain structures that control movement in a baby’s brain are connected after a stroke. In addition, we use the General Movements Assessment to learn how the baby is moving after a stroke. Participants are 3-5 months old and reimbursement for involvement is provided. Visit z.umn.edu/infant for more information and a video or contact us at 612-626-6415 or brown029@umn.edu.

Brain Stimulation and Hand Training Study

The Gillick Lab is continuing their investigation of brain stimulation paired with rehabilitation for children with cerebral palsy with weakness on one side of their body. Our goal for the extension of this study is to learn how children with a particular type of brain development respond to non-invasive brain stimulation and rehabilitation. We are enrolling children and young adults, ages 8-21 years old, in a 2-week camp format. The children will participate for 10 weekdays in sessions combining 20 minutes of non-invasive brain stimulation and 2 hours of bimanual, goal-directed therapy in a supportive environment. During bimanual therapy, the child works on activities with both hands. Goal-directed therapy includes activities that are important to the child and will include daily living skills. This study will be located on the University of Minnesota campus at our Center for Neurobehavioral Development. Parking is immediately adjacent to the building. If you’re interested in learning more about eligibility for your child or someone you know, please contact our Study Coordinator Maureen Boxrud at 612-626-6415 or brown029@umn.edu or visit our website at z.umn.edu/tcsc.

LAB TEAM UPDATE AND WELCOME NEW MEMBERS

Tonya Rich MA, OTR/L has successfully completed her oral preliminary exam and has now moved from being a PhD Student to a PhD candidate. Her proposed thesis study relates to the next Brain Stimulation and Hand Training Study (see above). Congratulations Tonya!

Jesse Kowalski, PT, DPT, is a pediatric physical therapist with five years of experience working with children with a wide range of diagnoses. She is now pursuing her PhD in our lab, with research interests in neurorehabilitation interventions for children with neurologic diagnoses. Jesse is an avid swimmer and music lover from Texas, and is looking forward to new adventures in Minneapolis with her dog, Bunny.

Ellen Sutter will begin her Doctor of Physical Therapy and PhD training in our lab, starting Summer 2017. She is excited to join a lab that combines two of her favorite things: neuroscience and working with children, as we study how to maximize brain plasticity and movement following stroke. She recently graduated from St. Olaf College and spent the past year working in neurorehabilitation research in St. Louis, MO. She is looking forward to being back in Minnesota and to exploring new running trails, museums and coffee shops in Minneapolis.

RECENT AWARDS AND HONORS

- Dr. Gillick was awarded the Eugene Michel’s Outstanding New Investigator Award from the American Physical Therapy Association. This national award recognizes outstanding contributions to research related to the physical therapy profession. Dr. Gillick has also received the University of Minnesota McKnight Land-Grant Professorship in recognition of her research and contributions to science.
- Lab member and post-doc Sam Nemanich, PhD, has received a MnDRIVE Fellowship to fund his involvement in working in our studies with children with hemiparesis. This is the third MnDRIVE Fellowship awarded to a member of the Gillick Lab.

z.umn.edu/gillicklab study results meet the team current studies
PARTNERING WITH THE CENTER FOR NEUROBEHAVIORAL DEVELOPMENT

The Center for Neurobehavioral Development (CNBD) is delighted to have Dr. Bernadette Gillick’s research team on our roster and are happy we have been able to provide an additional location for their research since June 2015! The CNBD is a research center at the University of MN that houses over thirty children’s studies with the overall goal of understanding brain and behavioral development throughout childhood, from a multi-disciplinary perspective.

The CNBD is ideal for Dr. Gillick’s research, because our space was designed by our experienced research team to accommodate children and families as much as possible, especially those that may have special needs or mobility issues. Everything from the family-friendly waiting room to the high-tech testing equipment has been geared toward making the clinical research experience better suited for young children.

This is a great opportunity for both the CNBD and Gillick Lab, as these studies are the first ever at the CNBD to be utilizing brain stimulation techniques, and to be investigating treatment for children with cerebral palsy (CP). We are thrilled to be part of this new research endeavor, and look forward to continuing to be another “home” for the important, cutting-edge research being done by the Gillick Lab into the future.

For more information, please check out our website: http://cnbd.umn.edu/participate-study.