

Infants Needed for Study on Early Brain Development

What are the goals of this study?

We want to learn more about patterns of brain development in children. We are studying differences in brain patterns between children with autism spectrum disorders and typically developing children. Our goals are to learn how the brain develops and to look for atypical patterns of brain growth. We hope our findings will improve methods of early detection and intervention for infants who may be at risk for developing autism.

Who can be a part of the study?

Infants six months of age or younger who have older siblings may take part. The infants' older siblings may be developing typically or be diagnosed with an autism spectrum disorder.

Why are you studying infant siblings of typically developing children as well as infant siblings of individuals on the spectrum?

Some infants who have older siblings diagnosed with autism will be diagnosed themselves. We will compare the brains of these infants to the brains of infants with siblings who developed typically (some of whom will develop typically themselves). This will help us learn how brains develop differently in children with autism.

What will we be asked to do?

At the start of the study, you will be asked to answer questions over the phone. When your baby is six, 12 and 24 months old, you will be asked to come to The Children's Hospital of Philadelphia with your baby. At these visits, your baby will be evaluated by research clinicians. Your child will also have a magnetic resonance imaging (MRI) scan while asleep.

Evaluation visits are scheduled during the day and last no more than two hours. MRI scans are done in the late afternoon or evening. Your child will have time to go through his or her usual bedtime routine prior to the scan. Once the child is asleep, the scan takes no more than 30 minutes.

What is an MRI scan?

MRI, or magnetic resonance imaging, is a way to take pictures of the brain using a large magnet, radio waves and a computer. The magnetic fields have no known harmful effects. MRI scans do not use x-rays and are not painful. Thousands of scans are carried out safely everyday. Sleep MRI studies have been determined to have minimal risk. As long as the individual receiving the MRI does not have any metal implants, MRI scans are safe. All volunteers will be screened for metal implants.

What are the benefits of taking part in this research study?

Families who take part will receive a comprehensive evaluation. A board-certified neuroradiologist reviews all scans and provides feedback if the evaluation shows any abnormality. Families will be paid for their time and travel costs.

I want to help! Who do I call?

If you have any questions or would like to join the study, please contact: Erin Bogue
Research Assistant
Center for Autism Research at
The Children's Hospital of Philadelphia
autism@email.chop.edu
1-866-570-6524 (toll-free)

