Why use brain MRI?

- The goal of our research is to learn more about how the brain develops from birth.
- By using newborn MRI, early changes in the brain can be observed and studied.
- Newborn MRI studies have greatly improved our understanding of early brain development and how this relates to learning and behavior in later years.
- With your help, we hope our MRI research will lead to better treatments and the best possible health outcomes for your baby.



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Newborn MRI

For research







What is MRI? Is it safe?

- Magnetic resonance imaging (MRI) is a routine technique for taking detailed pictures of the brain. These pictures help us understand the structure of the brain and its development.
- MRI is safe and painless. It does <u>not</u> use harmful X-rays or radiation, and does not require sedation. Most babies, once swaddled and fed, sleep right through an MRI.
- Every year, over 10 million people have an MRI, including babies and children.

Frequently Asked Questions

➤ What will it involve?

The scan will be done by a trained MRI technician during your baby's natural sleep. Your baby will lie on a bed or in an incubator that slides into the MRI scanner. He/she will wear earmuffs to reduce scanner noise, and will be wrapped in a blanket to keep him/her still, safe, and comfortable.

➤ Are there any risks?

There are no known health risks of an MRI scan. Unlike in an X-ray or CT scan, there is no risk of exposure to radiation.

➤ How long will it take?

A typical scan takes around 45-60 minutes or a bit longer if your baby wakes up.

➤ How will you make sure my baby is comfortable?

Your baby will be fed and swaddled prior to scanning and will likely sleep through the full scan. If your baby wakes, he/she will be resettled. If your baby cannot be settled at any point, the scan will be stopped.

➤ Who will be with my baby?

A neonatal nurse and/or another research team member will accompany your baby to the MRI. They will observe your baby through a window during the MRI. Your baby's heart rate and oxygen level will also be monitored continuously during the MRI. You may use the waiting room during the scan.



Will I get results of my baby's MRI?

A report of the MRI will be placed in your baby's medical record. The clinical team will have access to this report.

There is a (very small) chance that features, known as 'incidental findings,' could be picked up during an MRI. These may be normal or need further examination. If this is the case, you will be contacted and a referral to an appropriate specialist will be organized.

Can I get a DVD of my baby's MRI?

A DVD with all your baby's brain pictures will be available for you to take home.