

Every element of every patient's care is maximized through collaboration among leading pediatric cardiac surgeons, anesthesiologists, neonatologists, geneticists and pediatric cardiologists that the program provides in a "one-stop" opportunity for families. Patients and their families benefit from uniquely tailored treatment plans, and plain-talk explanations, to maximize well-being. We consider this personal touch essential: Maria Fareri Children's Hospital team members care for every patient the way they would care for their own families.

Maria Fareri Children's Hospital's world-class facilities include the area's only dedicated Pediatric Intensive Care Unit, Level I pediatric trauma and burn-care programs, and Regional Level IV (highest) Neonatal Intensive Care Unit.

Rest assured knowing your loved one will receive outstanding, customized care. Thank you for placing your trust in the fetal cardiology team at Maria Fareri Children's Hospital and WMCHHealth.

**About Maria Fareri Children's Hospital, a member of the Westchester Medical Center Health Network**

Maria Fareri Children's Hospital is the children's hospital for New York's Hudson Valley region and Fairfield County, Connecticut. This 136-bed advanced pediatrics facility in Valhalla, NY, cares for the region's most seriously ill and injured children, including those in need of cardiac surgery, neurosurgery, hematology and oncology treatments, organ transplants and other specialty pediatric services. Maria Fareri Children's Hospital also is home to the area's only Pediatric Intensive Care Unit, Level I pediatric trauma- and burn-care programs and its Regional Neonatal Intensive Care Unit. Visit [MariaFareriChildrens.org](http://MariaFareriChildrens.org) or follow the hospital at Facebook. [com/MFCHatWMC](https://www.facebook.com/MFCHatWMC) and Twitter. [com/MFCHatWMC](https://twitter.com/MFCHatWMC).

**100 Woods Road, Valhalla, NY 10595**  
**914.493.7000**  
[MariaFareriChildrens.org/fetal-cardiology](http://MariaFareriChildrens.org/fetal-cardiology)



# Fetal Cardiology

Comprehensive, Compassionate Care, Close to Home



The Fetal Cardiology Program at Maria Fareri Children's Hospital, a member of the Westchester Medical Center Health Network (WMCHHealth), provides state-of-the-art diagnosis, treatment and aftercare for the full spectrum of fetal pediatric cardiac conditions.

This exciting program has enhanced Maria Fareri Children's Hospital's position as the Hudson Valley's choice for life-changing and life-saving heart surgery. For appointments, information or referrals, please call 914.493.7896 or visit [MariaFareriChildrens.org/fetal-cardiology](http://MariaFareriChildrens.org/fetal-cardiology).

A component of the Maria Fareri Children's Hospital Maternal Fetal Medicine Center, the Fetal Cardiology Program delivers the highest standards of care. As part of the program, a renowned team of experts specializes in state-of-the-art cardiac surgical techniques, some available nowhere else in the northeastern United States. Fast-tracking protocols that accompany surgeries speed patients' recovery and hasten release from the hospital, often just a few days after open-heart surgery.



## How the Fetal Cardiology Program Cares for You

Congenital heart defects occur while the heart is developing. They can range from holes between heart chambers to a blocked heart valve to underdeveloped heart chambers and major vessels. Some defects may lessen delivery of sufficient oxygen throughout the body. While particular defects can be identified as early as 12 to 14 weeks old, typically they are clearly recognized when a fetus is 16 to 20 weeks old.

During the initial appointment, a cardiologist will determine the health of a baby's heart through advanced minimally invasive diagnostic tests that do not require surgery. Tests include a specialized cardiac ultrasound, called a fetal echocardiogram, performed on the mother to image the heart of the baby in utero. A fetal cardiac MRI, organized by our pediatric cardiovascular MRI specialist, also may be required in selected circumstances.

While most cardiovascular defects are best treated after birth, some heart problems, such as heartbeat irregularities, can be addressed even before birth. In general, diagnosing conditions at an early stage can help to organize immediate after-birth care, which can minimize risk for future problems such as neurological and other organ damage and optimize pregnancy management to secure the best outcomes for both mother and baby.

Fetal cardiology team members patiently help families understand the condition, the treatment options and the long-term outlook. They are there every step of the way to provide medical and support services during a stressful time.

## Revolutionary Surgical Technique

Khanh H. Nguyen, MD, Chief of Pediatric Cardiac Surgery, is a national leader in pediatric cardiovascular surgery. He has pioneered a breakthrough approach to treating congenital heart defects, having operated on over 500 children using an under-the-arm surgical-access technique called a right axillary incision. The procedure is safe, effective, versatile and leaves a nearly invisible scar. When the procedure is appropriate, it spares children from an incision (and later, a sizeable scar) down the center of the chest, and there is no need to surgically disturb the breast bone and chest muscle, which occurs during traditional open-heart surgery. The Fast-Tracking Program, used by the Maria Fareri Children's Hospital Pediatric Cardiac Surgery Team, speeds patients' recovery and safe release from the hospital after surgery.

## Meet the Fetal Cardiology Team

### Pediatric Cardiovascular Programs



Chief of Pediatric Cardiology  
Michael H. Gewitz, MD, FAHA, FAAP  
William Russell McCurdy Physician-in-Chief, Maria Fareri Children's Hospital

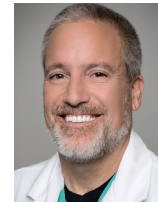


Chief of Pediatric Cardiac Surgery  
Khanh Nguyen, MD

### Cardiac Surgery | 914.493.8781



Chief of Pediatric Cardiac Surgery  
Khanh Nguyen, MD



John T. Carlson, PA-C



Ana Riccio, PA-C

### Fetal Cardiology | 914.594.2222



Leif Lovig, MD, Director



Deborah Friedman, MD



Henry Issenberg, MD



Marise D'Souza, MD



Community Affiliates:  
Eric Fethke, MD,  
Hudson Valley  
Pediatric Specialists



Claire McMahon,  
MD, Hudson Valley  
Pediatric Specialists



Coordinator:  
Cassandra Clay,  
914.493.7896

### Neonatal Intensive Care Unit 914.493.8558



Lance Parton, MD,  
Associate Chief



Boriana Parvez, MD,  
Senior Neonatologist

### Pediatric Intensive Care Unit 914.493.6200



Aalok Singh, MD,  
Pediatric  
Cardiothoracic  
Intensivist



Erin Rescoe, MD,  
Pediatric  
Cardiothoracic  
Intensivist

### Maternal Fetal Medicine | 914.493.2280



Andrew Elimian, MD,  
Chief



Frances Hsieh, MD



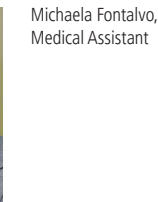
Juliet Mushi, MD



Geetha Rajendran, MD

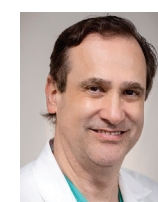


Desmond White, MD



Michaela Fontalvo,  
Medical Assistant

### Interventional Cardiology/ Pediatric Cardiac Catheterization 914.594.2222



Markus Erb, MD



Joseph Giamelli, MD



Heather Cowles,  
CPNP-PC, CPNP-PC



Cassandra Clay

## What to Bring to the Hospital for Your Baby's First Surgery

Maria Fareri Children's Hospital prioritizes family comfort and compassion during each patient's treatment, but a family's preparation and planning can ease a difficult time. We recommend the following be brought to the hospital to enhance the hospital experience:

For the baby: A blanket; bouncy seat; wet wipes; two-piece pajamas without zippers or feet; socks; hats; small stuffed animals; a going-home outfit; and a car seat for transportation home.

For mothers: A breastfeeding pillow; slip-on shoes; clothes to "wear" the baby to promote bonding; personal items; and contact information for the pediatrician, cardiologist, pharmacy, family members, neighbors and anyone who may assist with household needs.

For family members: Books; magazines; blankets; pillows; and snacks.

## Tips to Promote Infant Development In the Hospital

Bonding between a new mother and newborn is an important component of care. Techniques used at Maria Fareri Children's Hospital include skin-to-skin contact, offering items such as a soft blanket for the baby to hold, softly talking and singing, making eye contact as frequently as possible and scheduling a lactation consultation to ease breastfeeding, which is encouraged after all deliveries.

## Supporting Brothers and Sisters When a Sibling Has Surgery

When a child has healthcare needs, siblings may be sad, worried, jealous, angry or feel guilty. Such emotions are expressed through personality shifts, changes in eating habits, acting out or saying they feel sick themselves.

Maria Fareri Children's Hospital staff helps parents alleviate concerns through discussions that explain the situation, using words at each sibling's developmental level. Parents should encourage questions, offer answers that address each inquiry and should ask children about their feelings and keep daily routines as intact as possible. In addition, Maria Fareri Children's Hospital staff encourages hospital visits by siblings if the child is comfortable; otherwise, phone calls or video chats can help.