# Pediatric Cardiology Fellowship Training Program

## Description

Pediatric Cardiology  
NYU Fink Children’s Ambulatory Care Center  
160 East 32nd Street, New York, NY 10016  
Phone: 212-263-5940 | Fax: 212-263-3995  
**Program Director:** Gillian Henry, MBBS  
Gillian.Henry@nyumc.org

## Table of Contents

- Welcome! ............................................................................................................................................... 2
- Pediatric Cardiology Faculty .................................................................................................................. 2
- Faculty Profiles ...................................................................................................................................... 3
- Frank Cecchin, MD ................................................................................................................................. 3
- James Nielsen, MD ................................................................................................................................. 3
- Ralph Mosca, MD ................................................................................................................................. 3
- Cynthia Amirtharaj, MD ...................................................................................................................... 4
- Michael Argilla, MD ............................................................................................................................ 4
- Puneet Bhatla MBBS ............................................................................................................................ 4
- Melissa Busovsky-McNeal, MD ............................................................................................................ 4
- Suata Chakravarti, MD ......................................................................................................................... 5
- Anne Chun, MD ..................................................................................................................................... 5
- William Coetzee, DSc ........................................................................................................................... 5
- Gillian Henry, MBBS ............................................................................................................................ 6
- Alan Langsner, MD ............................................................................................................................... 6
- Achhau Ludomirsky, MD ..................................................................................................................... 6
- Sunil Malhotra, MD ............................................................................................................................. 7
- Matthew Martinez, MD ........................................................................................................................ 7
- Colin Phoon, MPhil, MD ....................................................................................................................... 7
- Daniela Rafii, MD .................................................................................................................................. 7
- Raj Sahulee, DO .................................................................................................................................... 8
- Diana Reformina, MSN, FNP ............................................................................................................... 8
- Abby Walsh, MSN, PNP ......................................................................................................................... 8
- Daniel Halpern, MD .............................................................................................................................. 9
- Catherine Weinberg, MD ..................................................................................................................... 9
- Brief Program Description .................................................................................................................. 10
- Selection ............................................................................................................................................... 12
- Pediatric Cardiology Fellowship: Didactic Learning Opportunities .................................................. 13
- Program Goals and Objectives ........................................................................................................ 14
- A Decade of Discovery: Publications by NYU Faculty ...................................................................... 15
WELCOME!
Welcome to NYU, and thank you for your interest in our program.

Our tradition of excellence continues today with the growth and development of a world-class academic pediatric and congenital heart center. Here you will find all the hallmarks of a large, comprehensive training program. We see an unusually broad clinical spectrum in a medium-size pediatric cardiac surgical program. We have committed, award-winning educators. We have an array of scholarly opportunities not only within our Division, but also spanning across all of New York University. And yet, we are small enough to be a tight-knit group, where our trainees are never “lost in the crowd” and where one-on-one learning with a mentor is still the norm. We believe, therefore, that we have the very best characteristics of both large and small programs.

We appreciate your taking this opportunity to learn more about us as we learn about you. We wish you the very best for your future career.

Gillian Henry, MBBS
Fellowship Program Director

Frank Cecchin, MD
Director, Pediatric Cardiology

PEDIATRIC & CONGENITAL HEART PROGRAM FACULTY
Our faculty is a distinguished group of individuals who hail from all over the country and the world. Widely recognized for their excellence and commitment, they are passionate about patient care, scholarship, and teaching. They are frequent invited lecturers at scientific conferences and academic medical centers. Our faculty members have won awards at the local and national levels, for patient care (“Best” lists), research, and teaching. Having trained and worked at some of the finest institutions anywhere, the NYU faculty ensure a breadth and depth of experience that create an outstanding training environment.

Frank Cecchin, MD
Chief, Division of Pediatric Cardiology

James Nielsen, MD
Associate Chief, Division of Pediatric Cardiology

Michael Argilla, MD
Director, Pediatric & Congenital Interventional Cardiology

Puneet Bhatla, MBBS
Director, Congenital Cardiovascular Imaging

Sujata Chakravarti, MD
Director, Pediatric Cardiac Critical Care

Gillian Henry, MBBS
Director, Pediatric Cardiology Fellowship Training

Ralph Mosca, MD
Chief, Division of Congenital Cardiac Surgery

Cynthia Amirtharaj, MD
Attending Pediatric Cardiologist

Melissa Busovksy-McNeal, MD
Attending Pediatric Cardiologist

Anne Chun, MD
Attending Pediatric Cardiologist

William Coetzee, DSc
Vice-Chair for Research, Pediatrics

Alan Langsner, MD
Attending Pediatric Cardiologist

Achi Ludomirsky, MD
Attending Pediatric Cardiologist

Sunil Malhotra, MD
Attending Surgeon, Division of Congenital Cardiac Surgery

Matthew Martinez, MD
Attending Pediatric Cardiologist

Colin Phoon, MPhil, MD
Attending Pediatric Cardiologist

Daniela Rafii, MD
Attending Pediatric Cardiologist

Raj Sahulee, DO
Attending Pediatric Cardiologist

Abigail Walsh, MSN, PNP
Pediatric Cardiology Nurse Practitioner

Diane Reformina, MSN, FNP
Pediatric Cardiology Nurse Practitioner

Dan Halpern, MD
Attending Cardiologist, Adult Congenital Heart Disease Program

Catherine Weinberg, MD
Attending Cardiologist, Adult Congenital Heart Disease Program
Leadership

Frank Cecchin, MD
Andrall E. Pearson Professor of Pediatric Cardiology
Professor of Pediatrics and Medicine
Director, Pediatric Cardiology and Director, Pediatric Electrophysiology
E-mail: Frank.Cecchin@nyumc.org

- Medical Education: East Carolina University, Brody School of Medicine
- Residency Training: Texas Children’s Hospital, Baylor College of Medicine (Pediatrics)
- Fellowship Training: Texas Children’s Hospital, Baylor College of Medicine (Pediatric Cardiology)
- Advanced Fellowship: Texas Children’s Hospital, Baylor College of Medicine (Pediatric Electrophysiology)

Clinical and Research Interests:
- Pediatric arrhythmias and electrophysiology
- Radiofrequency ablation of arrhythmias associated with congenital heart defects
- Innovative approaches to catheter ablation and device implantations

James Nielsen, MD
Professor of Pediatrics
Associate Chief, Pediatric Cardiology
E-mail: James.Nielsen@nyumc.org

- Medical Education: Tulane University School of Medicine
- Residency Training: Tulane University School of Medicine (Pediatrics)
- Fellowship Training: Mt. Sinai Medical Center (Pediatric Cardiology)
- Advanced Fellowship: Boston Children’s Hospital (Cardiac MRI)

Clinical and Research Interests:
- Congenital heart disease
- Advanced imaging modalities for the diagnosis and management of congenital heart disease

Ralph Mosca, MD
George E. Reed Professor of Cardiac Surgery
Director, Congenital Cardiac Surgery
E-mail: Ralph.Mosca@nyumc.org

- Medical Education: SUNY Upstate Medical School
- Residency Training: SUNY Syracuse (Upstate) Medical Center
- Fellowship Training: Columbia Presbyterian Medical Center (Cardiothoracic Surgery)
- Advanced Fellowship: University of Michigan Medical Center (Pediatric Cardiothoracic Surgery)

Clinical and Research Interests:
- Surgical approaches for congenital and pediatric heart disease
- Adult congenital heart disease
Cynthia Amirtharaj, MBBS
Clinical Assistant Professor of Pediatrics
E-mail: Cynthia.Amirtharaj@nyumc.org
Medical Education: Lokmanya Tilak Municipal Medical College, University of Mumbai
Residency Training: Icahn School of Medicine (Pediatrics)
Fellowship Training: Schneider Children’s Hospital (Pediatric Cardiology)
Clinical and Research Interests:
- Congenital heart disease
- Pediatric echocardiography

Michael Argilla, MD
Assistant Professor of Pediatrics
Director, Pediatric & Congenital Interventional Cardiology
E-mail: Michael.Argilla@nyumc.org
Medical Education: University of Colorado School of Medicine
Residency Training: NYU Medical Center (Pediatrics)
Fellowship Training: NYU Medical Center (Pediatric Cardiology)
Advanced Fellowship: UCSF Medical Center (Interventional Pediatric Cardiology)
Clinical and Research Interests:
- Pediatric and congenital interventional catheterization

Puneet Bhatla, MBBS
Assistant Professor of Pediatrics
E-mail: Puneet.Bhatla@nyumc.org
Medical Education: University of Rajasthan, India
Residency Training: Maimonides Medical Center (Pediatrics)
Fellowship Training: Mount Sinai Medical Center (Pediatric Cardiology)
Advanced Fellowship: Mount Sinai Medical Center (Non-Invasive Imaging)
Clinical and Research Interests:
- Non-invasive imaging: Cardiac MR, fetal and pediatric echocardiography
- Normative data for quantification of chamber size
- Segmental approach to congenital heart disease
- Cardiac intensive care of congenital heart disease patients

Melissa Busovskv-McNeal, MD
Assistant Professor of Pediatrics
E-mail: Melissa.Busovsky-McNeal@nyumc.org
Medical Education: Indiana University School of Medicine
Residency Training: Indiana University School of Medicine, Riley Hospital for Children (Pediatrics)
Fellowship Training: Yale-New Haven Hospital (Pediatric Cardiology)
Advanced Fellowship: Columbia University Medical Center, New York Presbyterian Hospital (Interventional Pediatric Cardiology)

Clinical and Research Interests:
- Pediatric and congenital interventional catheterization
- Pediatric cardiac critical care
- Aviation medicine

Sujata Chakravarti, MD
Director, Pediatric Cardiac Critical Care
E-mail: Sujata.Chakravarti@nyumc.org

Medical Education: University of Rochester School of Medicine and Dentistry
Residency Training: Montefiore Medical Center, Albert Einstein College of Medicine
Fellowship Training: Mount Sinai Medical Center (Pediatric Cardiology)
Advanced Fellowship: Children’s Hospital Boston (Cardiac Critical Care)

Clinical and Research Interests:
- Pediatric cardiac critical care

Anne Chun, MD
Clinical Associate Professor of Pediatrics
Director, Fetal Cardiology Program
E-mail: Anne.Chun@nyumc.org

Medical Education: University of Connecticut School of Medicine
Residency Training: University of Chicago Hospitals (Pediatrics)
Fellowship Training: Columbia University Medical Center, New York Presbyterian Hospital (Pediatric Cardiology)

Clinical and Research Interests:
- Non-invasive imaging: fetal and pediatric echocardiography
- Pulmonary hypertension
- Obesity

William Coetzee, DSc
Professor of Pediatrics, Pharmacology, and Physiology & Neuroscience
Vice-Chair for Research (Pediatrics)
E-mail: William.Coetzee@nyumc.org

Postdoctoral Training:
- Research Assistant, Department of Physiology, University of Potchefstroom
- Research Fellow, Department of Physiology, University of Leuven
- Research Officer, Ischemic Heart Disease Research Unit of South African Medical Research Council, University of Cape Town
- Senior Research Officer, Ischemic Heart Disease Research Unit of South African Medical Research Council, University of Cape Town
- Research Fellow and Honorary Lecturer, Department of Biochemistry, United Medical and Dental Schools of Guy’s and St. Thomas’ Hospitals
Research Interests:
- Electrophysiology and molecular biology of cardiovascular membrane ion transport proteins

Gillian Henry, MBBS
Assistant Professor of Pediatrics
Director, Fellowship Training, Pediatric Cardiology
E-mail: Gillian.Henry@nyumc.org

Medical Education: University of the West Indies
Residency Training: The Brooklyn Hospital Center (Pediatrics)
Fellowship Training: NYU Medical Center (Pediatric Cardiology)

Clinical and Research Interests:
- Non-invasive imaging: fetal and pediatric echocardiography
- Brain anomalies in the fetus with congenital heart disease
- Development of Pediatric Cardiology services in the Caribbean
- Medical education
- Medical informatics

Alan Langsner, MD
Assistant Professor of Pediatrics
E-mail: Alan.Langsner@nyumc.org

Medical Education: Universidad Autonoma De Guadalajara
Residency Training: New York Medical College (Pediatrics),
Fellowship Training: NYU Medical Center (Pediatric Cardiology)

Clinical and Research Interests:
- Congenital heart defects
- Adult congenital heart disease
- Medical education

Achiau Ludomirsky, MD
Professor of Pediatrics
Associate Chair for Outreach, Department of Pediatrics
E-mail: Achi.Ludomirsky@nyumc.org

Medical Education: Sackler School of Medicine, Tel Aviv University
Residency Training: Hadassah Hebrew University Hospital
Fellowship Training: Baylor College of Medicine,
Texas Children’s Hospital (Pediatric Cardiology)

Clinical and Research Interests:
- Congenital heart disease
- New imaging modalities for the diagnosis and management of congenital heart disease
- Therapeutic (high-intensity focused) ultrasound for the treatment of congenital heart disease
- Strain and strain rates measured by non-invasive modalities in the evaluation of ventricular function
Sunil Malhotra, MD  
**Assistant Professor of Cardiothoracic Surgery**  
E-mail: Sunil.Malhotra@nyumc.org  
Medical Education: New York University School of Medicine  
Residency Training: NYU Medical Center (General Surgery)  
Fellowship Training: NYU Medical Center (Cardiothoracic Surgery)  
Advanced Fellowship: UCSF Medical Center; Stanford University Hospital  
(Pediatric Cardiothoracic Surgery)  

*Clinical and Research Interests:*  
- Surgical approaches for congenital and pediatric heart disease  
- Adult congenital heart disease  

Matthew Martinez, MD  
**Assistant Professor of Pediatrics**  
E-mail: Matthew.Martinez@nyumc.org  
Medical Education: University of Nevada, Las Vegas  
Residency Training: Dartmouth-Hitchcock Medical Center (Pediatrics)  
Fellowship Training: Columbia University Medical Center, New York Presbyterian Hospital  
(Pediatric Cardiology)  

*Clinical and Research Interests:*  
- Congenital heart defects  
- Non-invasive imaging: fetal and pediatric echocardiography  

Colin Phoon, MPhil, MD  
**Associate Professor of Pediatrics**  
**Director, Pediatric Cardiology Research**  
E-mail: Colin.Phoon@nyumc.org  
Medical Education: University of Pennsylvania School of Medicine  
Graduate Education: University of Cambridge (Pharmacology)  
Residency Training: Johns Hopkins Hospital (Pediatrics)  
Fellowship Training: UCSF Medical Center and Cardiovascular Research Institute (CVRI)  
(Pediatric Cardiology)  

*Clinical and Research Interests:*  
- Congenital heart defects; fetal and pediatric echocardiography  
- Mitochondrial biology in heart development; Barth syndrome  
- Cardiovascular physiology and morphology in the developing heart  
- History of medicine, history of cardiology  

Daniela Rafii, MD  
**Clinical Assistant Professor of Pediatrics**  
E-mail: Daniela.Rafii@nyumc.org  
Medical Education: Weill Cornell Medical College  
Residency Training: New York Presbyterian – Weill Cornell Medical Center (Pediatrics)  
Fellowship Training: Columbia University Medical Center, New York Presbyterian Hospital
Clinical and Research Interests:

- Non-invasive imaging: fetal and pediatric echocardiography

Raj Sahulee, DO  
Assistant Professor of Pediatrics  
E-mail: Raj.Sahulee@nyumc.org

Medical Education: Arizona College of Osteopathic Medicine, Midwestern University  
Residency Training: St. Vincent’s Hospital and Medical Center, NY (Pediatrics)  
Fellowship Training: University of Texas Health Sciences Center – Houston (Pediatric Cardiology)  
Advanced Fellowship: Children’s Hospital of Philadelphia (Pediatric Cardiac Intensive Care)

Clinical and Research Interests:
- Pediatric cardiac critical care  
- Medical education

NURSE PRACTITIONERS

Diane Reformina, MSN, CFNP  
Pediatric Nurse Practitioner  
E-mail: Diane.Reformina@nyumc.org

Nursing Education: University at Buffalo (BSN)  
Pace University (MSN, FNP)

Clinical and Research Interests:
- Outpatient management of children and young adults with congenital heart disease

Abby Walsh, MSN, CPNP  
Pediatric Nurse Practitioner  
E-mail: Abigail.Walsh@nyumc.org

Nursing Education: Georgetown University (BSN)  
University of Pennsylvania (MSN, PNP)

Clinical and Research Interests:
- Outpatient management of children and young adults with congenital heart disease  
- Pediatric electrophysiology  
- Cardiac critical care
FACULTY PROFILES
Adult Congenital Heart Disease

Dan Halpern, MD
Assistant Professor of Medicine
Medical Director, Adult Congenital Heart Disease Program
E-mail: Daniel.Halpern@nyumc.org

Medical Education: Technion University
Residency Training: Ichilov-Tel Aviv Medical Center; Mount Auburn Hospital
Fellowship Training: Mt. Sinai-St. Luke’s Roosevelt Hospital Center (Cardiovascular Disease)
Advanced Fellowship: Children’s Hospital Boston (Adult Congenital Heart Disease)

Clinical and Research Interests:
• Adult congenital heart disease
• Arrhythmias in Eisenmenger syndrome
• Marfan syndrome

Catherine Weinberg, MD
Clinical Instructor in Medicine
E-mail: Catherine.Weinberg@nyumc.org

Medical Education: St. George’s University School of Medicine
Residency Training: St. Luke’s-Roosevelt Hospital Center (Internal Medicine)
Fellowship Training: St. Luke’s-Roosevelt Hospital Center (Cardiovascular Diseases)
Advanced Fellowship: Children’s Hospital of Wisconsin (Adult Congenital Heart Disease)

Clinical and Research Interests:
• Adult congenital heart disease
• General adult cardiology
BRIEF PROGRAM DESCRIPTION

Pediatric Cardiology is a comprehensive and dynamic program within the Department of Pediatrics at New York University School of Medicine and NYU Langone Medical Center. One of the nation’s leading academic medical centers, NYU Langone Medical Center carries a long and distinguished history of pediatric care, including pediatric cardiology care. Dr. Janet Baldwin, one the Division’s first Directors, introduced pediatric cardiac catheterization to the New York City region. Dr. Eugenie Doyle, who directed the Division over a 4-decade period, made important observations on rheumatic fever and contributed to enormous advances in the medical and post-surgical care of young patients as effective surgery for congenital heart defects was being developed. Dr. Doyle worked closely with the prominent NYU cardiothoracic surgeon Dr. Frank Spencer, who trained under Dr. Alfred Blalock, developer of the “blue baby operation” that bears his name. Dr. Michael Artman later expanded the scientific and clinical programs, while Dr. Stephen Colvin pioneered techniques in mitral valve and congenital heart repair as well as minimally-invasive surgical approaches. Dr. Achi Ludomirsky, widely recognized for his contributions to pediatric heart imaging, and then Dr. Frank Cecchin, a renowned leader in pediatric electrophysiology, were recruited to lead the Division of Pediatric Cardiology into a new era of growth, expanding our services broadly throughout the New York Metro region. Internationally recognized as an accomplished congenital heart surgeon, Dr. Ralph Mosca joined the Department of Cardiothoracic Surgery in 2009 as the Division Chief for Pediatric and Adult Congenital Cardiac Surgery.

The Division of Pediatric Cardiology and Dr. Mosca have worked closely together to build a world-class pediatric and adult congenital heart disease center at NYU. Since his recruitment in 2009, Dr. Mosca has performed all manner of corrective and palliative cardiac surgery, from complex neonatal operations to challenging adult congenital cases. Performing close to 300 operations yearly now, Dr. Mosca enjoys one of New York State’s lowest surgical mortality rates. NYU Langone Medical Center participates in the Gift of Life Program and in the Kids World Wide Program, which provide cardiac diagnostic and surgical care to children from overseas. Dr. Sunil Malhotra joined Dr. Mosca in 2010 as Assistant Professor in the Division of Pediatric and Adult Congenital Cardiac Surgery. His clinical interests include neonatal cardiac surgery and the surgical management of complex congenital cardiac defects. He serves as site director of the pediatric cardiac surgery program at the Children’s Hospital of New Jersey at the Newark Beth Israel Medical Center. The cardiothoracic surgery, pediatric cardiology, and pediatric critical care teams collaborate closely on the care of our post-operative patients.

Outpatients are seen in the NYU Faculty Practice offices and in a large general Pediatric Cardiology Clinic that is held weekly at Bellevue Hospital Center. Outpatient visits average more than 6000 per year. In addition, Drs. Dan Halpern and Catherine Weinberg from the Division of Cardiology (Department of Medicine) provide expertise in adult congenital cardiac care. The Pediatric & Fetal Echocardiography Laboratory provides cardiac ultrasound imaging for inpatients and outpatients at both NYU Langone Medical Center and Bellevue Hospital. The laboratory performs over 7000 studies each year, including over 1500 fetal and 200 transesophageal studies. We collaborate closely with the Department of Radiology and the Adult Echocardiography Lab. The MRI/MRA and cardiac CT suites provide state-of-the-art facilities for cardiac imaging and analysis, including 3-dimensional reconstruction. Stress treadmill exercise testing and stress echocardiography testing are routinely performed by Pediatric Cardiology faculty as indicated. The NYU Cardiopulmonary Exercise Laboratory provides additional comprehensive and sophisticated analysis of cardiac and respiratory responses to exercise. The Pediatric Cardiac
Catheterization Laboratory performs over 200 procedures per year and provides diagnostic, interventional and electrophysiology services to children and adolescents, as well as adults with congenital heart disease.

The new Hassenfeld Children’s Hospital at NYU Langone is scheduled to open in 2018. A uniquely child-friendly and family-oriented hospital-within-a-hospital, Hassenfeld Children’s Hospital will be part of NYU Langone’s Helen L. and Martin S. Kimmel Pavilion. Integral to the design of the pediatric hospital will be all private rooms, making it the only pediatric inpatient facility in Manhattan to have this feature. This state-of-the-art facility is designed to create a dedicated healing environment addressing the special medical, surgical, and psychological needs of children.

The ACGME–accredited three-year fellowship training program currently has 5 fellows. Fellows, residents, and medical students are taught at NYU Langone Medical Center’s Tisch Hospital. Bellevue Hospital Center, the “crown jewel” of the NYC public hospital system and the oldest public hospital in the US, serves as the major affiliate clinical and training site. The diversity of our clinical caseload is reflected in New York City’s population, and immigrants who have not received optimal care in their homelands provide challenging clinical problems rarely seen elsewhere in the US. Our clinical program is supported by dedicated specialists in other Departments/Divisions, including Cardiology (Cardiovascular Genetics and Adult Congenital Heart Disease), Radiology (Cardiac and Pediatric Radiology), and Pediatric Critical Care. NYU’s dedicated Congenital Cardiovascular Care Unit (CCVCU), one of the few of its kind in the nation, provides further focus and training on the pre- and post-operative management of the sick cardiac patient. Formal affiliations with major New York metro area hospitals, including Maimonides Medical Center, NYU Winthrop Hospital, NYU Langone Health – Brooklyn, and the Children’s Hospital of New Jersey, ensure the scope, breadth, and growth of our program.

The training program emphasizes knowledge and skills necessary for general pediatric cardiology clinical practice or further training in a pediatric cardiology subspecialty. In addition to a diverse patient population, numerous opportunities for didactic learning abound. Unparalleled opportunities for clinical, basic science, and epidemiological research span across departments and schools within New York University, the largest private university in the country. There are also opportunities to pursue courses in higher education offered by NYU, such as Master’s degree programs in public health and clinical investigation, and courses in medical statistics. Our fellows also learn how to teach, and teach well they do: two in recent years have garnered the Fellow of the Year, Award of Excellence in Teaching from the Pediatrics housestaff. We are justifiably proud of our graduates, who have placed well throughout the country in clinical practice, further subspecialty training positions, and in full-time faculty positions.
**SELECTION**

Fellows are selected to the program on the basis of past academic performance and potential for success in the field of pediatric cardiology. Prior clinical, teaching, research and administrative interests and experience are reviewed in conjunction with letters of recommendation by their residency director and faculty mentors. An interview with the Program Director, attending staff and current fellows is arranged for qualified applicants. This provides the applicant with an opportunity to view our clinical facilities, ask questions about our educational opportunities and philosophies, and express their goals and objectives for the training period and their careers. The program adheres to the Equal Opportunity Employer (EOE) / Affirmative Action (AA) policy of the NYU Langone Medical Center.

Applicants are accepted through the National Residency Matching Program and must apply directly to the NRMP to participate (www.nrmp.org). Accepted applicants must adhere to the policies and procedures of the Match and are notified directly by the NRMP and the Program Director. All candidates must have successfully completed a residency in an ACGME-accredited Pediatrics or Med-Peds residency program and must be eligible to obtain an unrestricted New York State medical license prior to the start of their training period.
<table>
<thead>
<tr>
<th>Conference</th>
<th>Frequency</th>
<th>Person(s) responsible for conducting conference</th>
<th>Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pediatric Cardiology Fellows Core Lecture Series</td>
<td>3 / month</td>
<td>Pediatric Cardiology Attending Emmert, Pediatric Cardiology Fellow</td>
<td>NYU</td>
</tr>
<tr>
<td>Pediatric Catheterization-Surgery Conference</td>
<td>1 / week</td>
<td>Pediatric Cardiology &amp; Cardiac Surgery Attending, Pediatric Cardiology Fellow</td>
<td>NYU</td>
</tr>
<tr>
<td>Echocardiography conference</td>
<td>1 / week</td>
<td>Pediatric Cardiology Attending Emmert, Pediatric Cardiology Fellow</td>
<td>NYU</td>
</tr>
<tr>
<td>Patient Care / Management Conference</td>
<td>1 / week</td>
<td>Pediatric Cardiology Attending Emmert, Pediatric Cardiology Fellow</td>
<td>NYU</td>
</tr>
<tr>
<td>Bellevue Pediatric Cardiology Post-Clinic Conference</td>
<td>1 / week</td>
<td>Pediatric Cardiology Attending Emmert, Pediatric Cardiology Fellow</td>
<td>BHC</td>
</tr>
<tr>
<td>Electrophysiology conference</td>
<td>1 / week</td>
<td>Pediatric Cardiology Attending Emmert, Pediatric Cardiology Fellow</td>
<td>NYU</td>
</tr>
<tr>
<td>New York Pediatric Echo Society</td>
<td>4 / year</td>
<td>Pediatric Cardiology Attending Emmert, Pediatric Cardiology Fellow</td>
<td>Rotating, NY City Hospitals</td>
</tr>
<tr>
<td>Dept. of Pediatrics Grand Rounds</td>
<td>1 / week</td>
<td>Pediatrics Attending, Pediatrics Chief Residents, Visiting Professors</td>
<td>NYU</td>
</tr>
<tr>
<td>Adult Cardiology Grand Rounds</td>
<td>1 / week (as relevant)</td>
<td>Adult Cardiology Attending, Visiting Professors</td>
<td>NYU</td>
</tr>
<tr>
<td>Dept. of Pediatrics M&amp;M</td>
<td>QO week</td>
<td>Pediatrics Chief Residents, Pediatrics Attending</td>
<td>NYU</td>
</tr>
<tr>
<td>Basic Science Rotation: Work-in-Progress talks</td>
<td>~Q3months</td>
<td>Pediatric Cardiology Fellow Emmert</td>
<td>NYU</td>
</tr>
<tr>
<td>Basic Science Rotation: Journal Club</td>
<td>As scheduled</td>
<td>Pediatric Cardiology Fellow Emmert, Lab Personnel, Basic Science faculty</td>
<td>NYU</td>
</tr>
<tr>
<td>General Clinical Research Center</td>
<td>As scheduled</td>
<td>GCRC personnel</td>
<td>BHC</td>
</tr>
<tr>
<td>Maternal Fetal Conference</td>
<td>monthly</td>
<td>OB, NICU and Cardiology attendings and fellows</td>
<td>NYU</td>
</tr>
</tbody>
</table>
PROGRAM GOALS AND OBJECTIVES

General Program Goals
The program is designed to:

- Facilitate acquisition of knowledge and technical expertise in the care of children with cardiovascular disease.
- Provide the academic tools to enable trainees to make meaningful scholarly contributions to the field of pediatric cardiology.
- Develop the capacity for on-going continuous education and self-improvement beyond the period of formal training.

General Program Learning Objectives

Patient Care
Each fellow will:

- Demonstrate expertise in history-taking and physical examination including family history which is a critical aspect of the evaluation of pediatric patients with cardiovascular disease.
- Develop expertise in interpretation of radiography, electrocardiography, exercise testing, ambulatory electrocardiography and magnetic resonance imaging.
- Develop expertise in the performance and interpretation of echocardiography. Each fellow must perform and interpret a minimum of 300 pediatric echocardiography studies.
- Demonstrate understanding of the indications for and limitations of invasive testing and management, including cardiac catheterization, angiography, electrophysiologic testing and pacemaker implantation. Each fellow must participate in a minimum of 100 cardiac catheterizations and 10 intracardiac electrophysiologic studies.
- Develop expertise in the pre-and post-operative care and evaluation of patients having open or closed cardiac surgery.
- Demonstrate understanding of principles of mechanical ventilation, resuscitation, cardioversion, pericardiocentesis and temporary pacing.
- Develop expertise in the comprehensive evaluation and management of outpatient cardiology patients.

Medical Knowledge
Each fellow will:

- Demonstrate understanding of the embryology and anatomy of the normal heart and vascular system, clinical morphological correlations and pathology
- Demonstrate understanding of congenital and acquired heart disease, as well as pertinent aspects of neonatology, anesthesiology, critical care, cardiothoracic surgery, cardiac radiology and adult cardiology. These topics will be covered in series of didactic sessions as well as part of ongoing hands-on training.
A Decade of Discovery: Publications by NYU Pediatric Cardiology Faculty


Egidy Assenza G, Valente AM, Geva T, Graham D, Pluchinotta FR, Sanders SP, Autore C, Volpe M, Landzberg MJ, Cecchin F. QRS duration and QRS fractionation on surface electrocardiogram are markers of right ventricular


