

Pediatric Cardiology Syllabus

We are looking forward to working with you during your pediatric cardiology rotation. The cardiology selective and elective is a rotation during which you will have both inpatient and outpatient experiences. For the intern selective, the inpatient experience is primarily for the patients on the fourth floor. For the elective, the inpatient experience is more limited, and is usually in a consultative role. We hope that you achieve your educational goals during this rotation and become more comfortable caring for the pediatric patient with cardiac symptoms and both acquired and congenital cardiac disease. If you have any questions or concerns, call Dr. Arwa Saidi.

Contact Information and Orientation:

Please contact Dr. Saidi before the rotation to arrange a time/ place for this meeting. If unavailable, Dr. Saidi will arrange for another faculty member to meet with you. On the first day of the rotation, Dr. Saidi will meet with you to discuss the goals and objectives in person. If you are away during the first week of the rotation, please let Dr. Saidi know. She can be reached by email: asaidi@ufl.edu or cell phone 352-258-0125.

Interns: Dr. Saidi can meet with you immediately after morning report on Wednesday.

Seniors: Please join us in surgical case conference on Monday at 7:30am in HD-504.

Overall Expectations:

1. “Sign” that you’ve read these goals and expectations in New Innovation.
2. Providing excellent patient care in the inpatient and outpatient setting (PC and P)
3. Attend surgery conference at 7:30 on Monday morning (PC and P)
4. Attend Cath conference (Wednesday at 7:30) (PC and P)
5. Meet with Dr. Van Mierop on Tuesday and Friday at 9:00am to review anatomy and embryology (MK)
6. Open communication with cardiology attending and fellow (P and I &CS)

Educational Expectations and Scholarly Activities:

The resident on the pediatric cardiology selective/ elective will participate in the management of pediatric patient (< 21 years of age) with cardiovascular disease. This management will be under the supervision of the cardiology attending in the inpatient and outpatient setting. The resident will develop skills of evaluation, diagnosis and management of the pediatric cardiac patients as relevant to a general pediatrician. On the first day of the rotation, the resident will be provided with an electronic folder with reading material to supplement their clinical learning and other reading. The resident is also expected to search for and review one **relevant article** during the rotation and to **discuss** this article with the faculty and fellow on service.

Academic Goals:

1. Accurately describe murmurs and differentiate between physiological benign and pathological murmurs (PC)
2. Know the normal age related changes in heart rate and blood pressure (MK, PC)
3. Know how to read an EKG and the normal variations in heart rhythm
4. Know how to identify and treat common pediatric arrhythmias (PC, MK)
5. Understand indications for and limitations of:
 - a. Echocardiography
 - b. EKG
 - c. Chest XRAY
 - d. Holter
 - e. Treadmill stress test
 - f. Cardiac MRI
 - g. Chest CT
 - h. Cardiac catheterization
6. Know the differential diagnosis and initial evaluation of infants and children with cardiac symptoms and signs (MK, PC)
7. Accurately describe the fetal circulation(MK)
8. Know the anatomy, pathophysiology, clinical presentation, evaluation and management of structural and acquired heart disease. (MK)
 - a. Structural:
 - i. PDA
 - ii. ASD
 - iii. VSD
 - iv. AVC
 - v. Pulmonary stenosis/atresia
 - vi. TOF
 - vii. D-TGA
 - viii. Aortic stenosis
 - ix. Coarctation of the aorta
 - x. Hypoplastic left heart syndrome
 - xi. TAPVR
 - b. Acquired:
 - i. Myocarditis/ cardiomyopathy
 - ii. Kawasaki disease
 - iii. Essential hypertension
 - iv. Rheumatic fever
 - v. Endocarditis
9. Know the indications for referral to cardiac surgery and post-operative sequelae (MK and PC) and the indications for and risks of the commonly used cardiac drugs (diuretics, digoxin, ACEI, B blockers and anti arrhythmics). (MK)

Key: P=Professionalism, MK=Medical Knowledge; PC=Patient Care; IC=Interpersonal Communication; SBP=System Based Practice, PBLI=Practice-based Learning & Improvement

Clinical Goals

- Develop cardiovascular physical examination skills. (PC)
- Distinguishing an innocent murmur from congenital heart disease. (PC)
- Develop an approach to the neonate with congenital heart disease. (PC, MK)
- Knowledge of common pediatric cardiology emergencies, their recognition, and initial therapy. (PC)
- Understand oxygen transport as it is applied to general heart disease. In addition, the resident will learn fundamental interpretation of hemodynamics as it is applied to patient management decision. (MK, PC)
- Observe the surgical approach to congenital heart disease and will have exposure to postoperative care of these patients. (PC)
- Develop skills in interpretation of the pediatric electrocardiogram roentgenogram. In addition, will develop an appreciation for diagnostic capability and use of echocardiography the management of children with congenital heart disease. (MK, SBP)
- Participate in the interpretation of hemodynamic catheterization data. (MK)
- Become comfortable with the initial management of common pediatric heart problems such as supraventricular tachycardia, congestive heart failure from a large left-to-right shunt, and tetralogy of Fallot with hypoxemic spells. (PC, MK)

Clinical Objectives

- The primary focus of the pediatric resident will be in the ambulatory care setting where he will do the initial evaluation and examination of the patient. His assessment will be presented to a pediatric cardiology attending for discussion of diagnosis and management. This experience has been designated as a priority for this rotation. Ambulatory experience is available Monday through Friday. (practice based learning, medical knowledge, patient skills)
- During the ambulatory cardiology experience the resident will participate in specialty clinics of Adult Congenital heart Disease, Elecrophysiology, Preventative Cardiology , Heart transplantation, and cardiomyopathy. Expectations are that the resident will be assigned at least once during the rotation to these specialty clinics. (Medical knowledge, Patient skills)
- Resident will participate on inpatient rounds with the Consult Cardiologist at minimum of two days/week to review inpatient assessment and management of neonates and participate in hospital cardiology consultation.
- During this rotation the pediatric resident will participate in the daily electrocardiogram reading activity and actively participate in didactic conferences related to the reading of the pediatric electrocardiogram.
- During the rotation the residents will review pathological specimens of congenital heart defects with Dr LH Van Mierop. Minimum of two sessions have been planned during each four week rotation.(medical knowledge)
- Didactic and practical experience with Echocardiography will be provided by senior ECHO technicians and during echocardiographic examinations on their assigned patients.
- The resident will be expected attend all conferences during their rotation . These include “Catheterization conference” (Resident will learn basic hemodynamic assessment); Cardiovascular Surgical Conference (Resident will experience a discussion of the surgical management of basic and complex congenital Heart disease.)
- Residents will use their time effectively to manage patients, be active learners and read assigned materials during the rotation.(Core curriculum articles; Clinical Cardiology(JR Zuberbuhler), Textbook of Pediatric Cardiology (Gessner/Victorica) Materials will be provided.(Professionalism)

- Residents will communicate with patients, families, allied health professionals, faculty and all others with whom they work in an honest and respectful manner.(communication, Professionalism)
- Night call during the rotation will average every fourth night/weekend. This call will not interfere with their continuity care clinic.