Course credit or length: 2-4 Weeks. This elective is available to one student at a time.

Reporting Information: Student must contact Dr. Jack Stines at least one week prior to elective for reporting information.

Course directors and contact information: Dr. Jack Stines, 304.691.1371, stines1@marshall.edu

Course coordinator and contact information: Emily Smith, 304.691.1371, pelfrey40@marshall.edu

Course location: Marshall Pediatrics, Marshall Medical Center, Cabell Huntington Hospital

Course Description: The pediatric cardiology rotation is intended to familiarize senior medical students with various congenital and acquired heart diseases they may encounter during their medical careers. They are expected to become familiar with basic EKG and chest X-ray interpretation where applicable to heart disease.

Additional Responsibilities of Students

1. Participate in outpatient clinics
2. Participate in inpatient consultations (if applicable)
3. Participate in formal and informal discussions of selected topics
4. Pursue outside reading to supplement learning

Self-Directed Learning:
As a medical student, you are encouraged to use any unstructured time to read about your patients, research questions that arise during the day, prepare for case conferences, and prepare for student-faculty rounds. Preceptors have been specifically asked to look for evidence that you have read articles and books between clinic sessions. Use this time to build your knowledge of medicine and learn from your patients.

PEDIATRIC CARDIOLOGY

COMPETENCIES

Patient Care: Students are expected to provide patient care that is compassionate, appropriate and effective for the promotion of health and prevention of illness.

Thus, at the end of this elective, students must

- Consistently gather accurate and appropriate information for each patient encounter in which they participate.
- Perform physical examinations on children across age range.
- Perform basic cardiovascular examinations.
- Develop and implement an appropriate assessment and plan.
Medical Knowledge: Students must demonstrate proficiency in obtaining knowledge through discussion on rounds, specific readings, online and through reference literature. They will apply an open-minded, analytical approach to acquiring new knowledge, access and critically evaluate current medical information and scientific evidence, and apply this knowledge to clinical problem-solving, clinical decision-making, and critical thinking.

Thus, at the end of this elective, students must

- Demonstrate basic knowledge of heart murmurs with concomitant knowledge to judge innocent versus pathologic murmurs.
- Describe the signs and symptoms of common congenital cardiac diseases as well as assessment of clinical information to form a diagnosis and treatment plan.
- Demonstrate basic knowledge of principles of EKG methodology and data interpretation in an age-appropriate manner.
- Demonstrate basic competence in the identification of common cardiac pathophysiology including organic murmurs, cyanosis and congestive heart failure.
- Demonstrate basic knowledge of cardiac conditions requiring emergent intervention with appropriate knowledge of the appropriate intervention.
- Demonstrate basic knowledge of assessment and appropriate intervention in ECG abnormalities and arrhythmias.

Practice-Based Learning and Improvement: Students are expected to investigate and evaluate patient care practices, appraise and assimilate clinical information to make appropriate patient management decisions and learn from error.

Thus, at the end of this elective, students must

- Demonstrate basic ability to critically review the pediatric cardiology literature and web-based information.
- Evaluate their own performance and gaps in their own knowledge base on an ongoing basis, and target their self-directed learning to enhance performance and fill knowledge gaps.
- Consistently learn from error.
- Consistently provide, request, accept and incorporate feedback.
- Work well with other learners to enhance knowledge.

Interpersonal and Communication Skills: Students are expected to consistently demonstrate interpersonal and communication skills that result in effective information exchange. They must be able to collaborate with patients, their families and professional associates.

Thus, students are expected to

- Effectively communicate with staff, physicians, residents, patients and the patient’s family members.
- Practice effective conflict resolution when appropriate.
- Communicate crucial and appropriate information through written medical records and patient presentations.
- Consistently avoid medical jargon when speaking with patients and their families.
• Demonstrate the ability to communicate with patients from a wide range of backgrounds.
• Demonstrate the ability to counsel and educate patients and their families in a comprehensible and supportive manner.

**Professionalism:** Students are expected to consistently demonstrate a commitment to carry out professional responsibilities, adhere to ethical principles and be sensitive to diversity. They must have a responsible attitude toward their patients, their profession and society.

Thus, students are expected to
- Consistently act in the best interest of their patients.
- Demonstrate a caring and respectful demeanor when interacting with patients and their families.
- Maintain patient/family confidentiality.
- Demonstrate sensitivity to ethical principles, culture, age, gender, religious belief, sexual orientation, and disability.
- Acknowledge errors and self-limitations.
- Conscientiously be punctual, and reliable.
- Consistently show skill improvement in the management of complex patients and their families.

**Systems-Based Practice:** Students are expected to develop and understanding of a quality health care that is cost-effective and advocate for patients within the health care system. They are also expected to develop an understanding and appreciation of the interconnectedness and dependence of multidisciplinary health care services.

Thus, students must
- Advocate for patients and families as they navigate system complexities
- Participate in problem case conferences

**ASSESSMENT METHODS**

**Mid Point Evaluation**
In accordance with LCME standard ED-30, the Course Director will evaluate student performance at mid-point to review the student’s professional, clinical and academic performance up to that point. The formative evaluation must be reviewed with the student and the student will have an opportunity to discuss with the Course Director. The form must be signed by the student and returned to the Course Director. The Course Director shall then forward a copy of the form to the Office of Academic Affairs. The form will NOT however be included in the student’s official academic record. For two week electives, oral feedback shall be provided at the end of the first week.

**Preceptor Evaluation - 100%**
The preceptors’ evaluation will be based, but not limited to, upon the following factors:
- Attendance and participation in assigned activities
- Demonstration of knowledge and skills
- Maturity and Professionalism
- Oral Case presentation/patient workup
- Informal oral case discussions and presentations
- Self-directed learning

**Grade Mode:** Honors/Pass/Fail
The students are directly observed by the attending and assessed on clinical knowledge, professionalism, self-directed learning and attitude to learning, critical thinking, history taking and physical examination skills and decision making skills using the stated course objectives.

MUJCESOM Policies: All medical students taking this course will comply with School of Medicine policies given at http://musom.marshall.edu/students/policies.

Reading: www.UpToDate.com as per assignment by faculty and residents