PED 2003: Exploration of Pediatric Cardiology  
PED 2103: Pediatric Cardiology

<table>
<thead>
<tr>
<th>Faculty Coordinators</th>
<th>Sarah Blumenschein, M.D.</th>
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<tbody>
<tr>
<td>Hospital</td>
<td>Children's Medical Center</td>
</tr>
<tr>
<td>Blocks Offered</td>
<td>1 – 12</td>
</tr>
<tr>
<td>Length</td>
<td>PED 2003: 2 weeks</td>
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<td></td>
<td>PED 2103: 4 weeks</td>
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<tr>
<td>Max # of students</td>
<td>2</td>
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<tr>
<td>Phone</td>
<td>214/456-2333</td>
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<td>First Day Contact</td>
<td>Attending</td>
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<tr>
<td>First Day Place</td>
<td>CMC, Cardiology Clinical</td>
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<tr>
<td>First Day Time</td>
<td>8:30 AM</td>
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I. Faculty
Sarah D. Blumenschein, MD – preventive cardiology
Bibhuti Das, MD – heart transplantation
Vivian Dimas, MD – interventional cath
Adrian Dyer, MD – MRI, echocardiography including fetal, outreach
David E. Fixler, MD – Down Syndrome, young adult cardiology
Candace Gibbin, MD – outreach and echocardiography
Lisa Heistein, MD – outreach and echocardiography
Catherine Ikemba, MD – echocardiography, including fetal
Amy Juraszek, MD – cardiac pathology, echocardiography
Colin Kane, MD – outreach and echocardiography
Matthew Lemler, MD – echocardiography
Lynn Mahony, MD – Marfan syndrome, myocardial diseases
Alan Nugent, MD – interventional cardiology
Claudio Ramaciotti, MD – echocardiography
William A. Scott, MD – electrophysiology, neuromuscular disorders
Kavita Sharma, MD - outreach
Poonam Thankavel, MD – echocardiography, including fetal
Suren Veeram Reddy, MD – interventional cardiology
Shawyntee Vertilus, MD - preventive cardiology
Ilana Zeltzer - electrophysiology
Thomas M. Zellers, MD – young adult cardiology, interventional cath

II. Fellows:
1st Year
Rachel Jamison, MD
Danielle Moyé, MD
Robyn Puente, MD

2nd Year
Kevin Engelhardt, MD
III. Goals for Cardiology Elective

A. Technical Skills

1. Physical Examination: The resident or student should be able to recognize signs of structural and acquired heart disease including abnormal vital signs, abnormal impulses, abnormal heart sounds including organic murmurs, cyanosis, clubbing, abnormal pulses, and organomegaly. He/she should be able to differentiate between a functional and organic murmur, and also be able to recognize the typical murmurs of VSD, PS, AS, PDA and mitral and aortic insufficiency.

2. Chest radiograph interpretation: The resident or student should be able to recognize cardiomegaly vs. normal heart size, and increased or decreased pulmonary blood flow, and aortic arch location.

3. ECG Interpretation: The resident or student should be able to recognize the rhythm, abnormal intervals, and signs of atrial enlargement, and ventricular hypertrophy. He/she should also be able to recognize supraventricular tachycardia, atrial fibrillation, ventricular fibrillation, and heart block.

4. Cardiac Catheterization: The house officer should become familiar with interpretation of the hemodynamic findings on a cardiac catheterization report, that is, localize the levels of intracardiac shunting, recognize the presence of pulmonary hypertension, and valvar stenoses.

B. Basic Cardiology

The house officer/student should be able to diagnose (clinically) and understand the pathophysiology, natural history, long-term post operative prognosis, and current management concepts of common cardiac problems in children, including:

1. Ventricular septal defect
2. Atrial septal defect
3. Coarctation
4. Pulmonary valve stenosis
5. Aortic valve stenosis
6. Patent ductus arteriosus
7. Tetralogy of Fallot, including hypercyanotic spells
8. Transposition of the great arteries
9. Acute pericarditis (with pericardial effusion)
10. Rheumatic fever
11. Myocarditis
12. Cardiomyopathy
13. Paroxysmal supraventricular tachycardia
14. Heart block
15. Premature atrial or ventricular contractions
16. Syncope
17. Long QT syndrome
18. Hypertension
19. Lipid disorders

It is expected that the house officer will develop (or already knows) a basic knowledge of normal cardiovascular and pulmonary physiology.

The resident/student should develop an approach to the patient with:

1. Cyanosis
2. Chest pain
3. “Irregular heart beat”
4. Palpitations
5. Rapid heart beat
6. Dizziness/syncope
7. Excessive fatigue/dyspnea with exertion

This should include a differential diagnosis and plan for further evaluation, if necessary.

IV. Methods for Reaching Desired Goals
A. Reading of handouts in orientation packet, Dr. Mahony’s handbook for the inpatient cardiology service (especially for discussion of the various structural lesions), basic texts and recommended journal articles (provided in the binder in the conference room).
B. Examination of patients, with direct discussion of findings with attending cardiologist. Some attendings will have you accompany them to see the patient and others will have you see the patient first.
C. Attendance at cardiology conferences.
D. Select one cath patient each week, observe cath and go over cath data with cardiologist to understand the calculations of physiological data.

V. Responsibilities and Requirements of Pediatric Residents/Students:
A. Attend all outpatient clinics and see patients as directed by attending cardiologist.
B. Present written interpretations of assigned ECG’s at ECG Conference. (see page 4)
C. Attend the Cath Conference and Cardiac Surgery Case Conference.
D. Residents/students should let the Attending Cardiologist or Cardiology Receptionist know of their whereabouts at all times. Unless pediatric call responsibilities interfere, the residents are expected to take part in the activities of the Cardiology Service until afternoon clinics and conferences are completed. If it is necessary for you to be absent for any part of the rotation, you should speak with Dr. Fixler.

VI. Evaluation
Your evaluation will be completed by Dr. Blumenschein or her designate, with input from the other cardiologists. If you have any questions about your evaluation or would like to discuss it beforehand, contact Dr. Blumenschein.