

CARDIOLOGY

Contact: Felisa Evans (955-4350)

When to contact: One month prior

Preceptors: Christopher Erickson, M.D.; Scott Fletcher, M.D.; Carl Gumbiner, M.D.; John Kugler, M.D.;
David Danford, M.D.; Ameeta Martin, M.D.; Zahid Amin, M.D.

Where to meet: Pediatric Cardiology offices (Children's Hospital)

I. OVERVIEW

This elective is a combined inpatient/outpatient experience for the pediatric resident.

II. OBJECTIVES

- Elicit thorough and accurate history from the patient (parents).
- Perform and interpret a cardiovascular examination.
- Understand the indications for ordering Ancillary cardiac tests (ECG, Echo, CXR, MRI, exercise test, Holter monitor and event recorder).
- Understand the basic types of acyanotic and cyanotic congenital heart disease.
- Understand the evaluation of the cyanotic newborn.
- Understand the causes and treatment of congestive heart failure.
- Understand diagnosis and management of patients with Kawasaki disease and other inflammatory heart disease.
- Understand the basic echocardiographic views and the utility of the echocardiogram.
- Understand the basic management of the postoperative cardiac patient and learn to recognize the common post-op problems.
- Recognition and management of supraventricular tachycardia and common dysrhythmias.
- Understand basic concepts of electrocardiography and be able to recognize and interpret frequently encountered abnormalities.
- Understand basic concepts in interpreting chest x-ray films relative to cardiovascular system.
- Understand indications for surgical or transcatheter therapy for common congenital defects.
- Residents must be able to provide family-centered patient care that is developmentally and age appropriate, compassionate, and effective for the treatment of health problems and the promotion of health. Residents must know, critically evaluate, and use current medical information and scientific evidence for patient care. Residents will learn to use this information to improve their patient care practices. Residents must demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their families, and professional associates. Residents must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to diversity.

III. FIRST DAY

The elective usually begins on Monday. Report to the Children's Scott Pavilion Glow Education Center, 8200 Dodge Street at 8:15am for cardiac care conference. Additional orientation in the Cardiology Department will follow that conference and will include a pre-test, and staff introductions.

IV. SUPPLEMENTARY MATERIALS TO BE DISTRIBUTED AFTER MONDAY CONFERENCE

Pediatric Cardiology problem case book
Pediatric Cardiology problem case videotape-to be returned, rewound, at the end of elective
SBE prophylaxis cards
ECG criteria card
Digoxin card
Kawasaki article
Pediatric bacterial endocarditis
Congestive heart failure
Cyanosis in the newborn

V. PRE-TEST

All residents participating in the Pediatric Cardiology elective will take a pre-test on their first day. This pre-test should be graded and then kept by the resident to serve as a guide for discussion during daily clinic.

VI. READING LIST

There is no specific reading requirement for this elective. Residents are expected to demonstrate evidence of their reading with reference to their assigned patients.

- A. Pediatric Textbooks: Cardiology chapters in the major textbooks of Pediatrics (Vaughn and McKay; Rudolph and Hoffman; Oski)
- B. Cardiology Texts: The cardiology staff has the following texts. They are not to be borrowed without permission and, in general, should not leave the hospital or be borrowed overnight.
 - The Science and Practice of Pediatric Cardiology-Garson, Bricker, McNamara
 - Heart Disease in Infants, Adolescents, and Children-Moss
 - CIBA Collection-The Heart-Netter
 - Heart Disease in Infancy and Childhood-Keith, Rowe, Vlad
 - Heart diseases in Infancy-Moller and Neal
 - Pediatric Cardiology for the Practitioner-Park
- C. Case Book: The cases in the problem case book are thoroughly referenced for further reading.
- D. Internet specific pediatric cardiac case studies including ECG "of the week" are available.
- E. Other References: Each of the cardiologist has a library which you are encouraged to use (with permission).
- F. Photocopying
 - Xeroxing is available. Please ask one of the support staff for instructions.
 - The secretaries are not expected to photocopy materials for you.

- Doctors and students are notorious for copying articles in lieu of reading them. This practice is strongly discouraged. As a rule of thumb, you should consider Xeroxing materials after you have read them and wish to save and/or reread them.

VII. CONFERENCES

Cardiac Care Conference-CH (Monday's 8:15am-required)

Grand Rounds-CH (Friday's 8:00am-required)

VIII. LECTURES

Cardiologists and Nurses give a series of scheduled lectures during the month. Resident attendance is required. The schedule is provided on day 1 of the elective.

IX. DAILY CLINIC SCHEDULE

CH: Monday pm-Fletcher
 Monday pm-Kugler
 Tuesday am-Amin
 Tuesday pm-Gumbiner
 Wednesday am-Erickson
 Wednesday am-Kugler
 Thursday am-Danford
 Thursday pm-Fletcher
 Friday am-Danford

UNMC: Wednesday am-Danford
 Friday am-Gumbiner

Lincoln: Tues, Wed, Thurs-Martin.

Check with Debra Gibbs with any questions regarding clinic schedules.

X. PATIENT CARE RESPONSIBILITIES

- Daily rounds with Ch Service Cardiologist –PICU, Med-Surg, NICU
- Daily notes on inpatients
- Perform initial consult for all new patients during the day-with the exception of routine post-op PICU consults.
- Perform scheduled outpatient evaluation with the CH Service Cardiologist.
- Attend other scheduled (afternoon) outpatient Cardiology clinics when inpatient duties are completed.

XI. NIGHT CALL REQUIREMENTS-None

XII. WEEKEND CALL REQUIREMENTS- None

XIII. OTHER REQUIREMENTS

Cardiac catheterization-residents are encouraged to attend at least one catheterization.

Cardiac surgery-residents are encouraged, but not required to observe one cardiac surgical procedure.

Exercise study encouraged.

Echocardiography study-encouraged.

Research project-this option is available but must be arranged and carefully planned with one of the staff well in advance of the elective.

XIV. RESIDENT PRESENTATIONS

Each resident will give a 15-20 minute (maximum) presentation (usually power point) to the other students and staff during the last week of their elective. The topic is of their own choosing, but should be discussed with and approved by Dr. Fletcher or Dr. Gumbiner during the first or second week.

XV. PATIENT LOG

Residents are required to maintain a patient log (see below) during their month on elective. A copy of the daily clinic patient lists will be made available.

XVI. POST TEST

A post test will be completed during the final three days of the Pediatric Cardiology elective. All questions will cover material similar to the pretest and should have been discussed in detail during the rotation.

XVII. EVALUATION CONFERENCE

A short (15 minutes) evaluation conference will be conducted mid-rotation at the end of the elective. The staff cardiologist responsible for submitting the resident evaluation will discuss that person's performance. The staff, Dr. Gumbiner and Dr. Fletcher will have access to pre and post test scores, patient log, and other staff input. This is an opportunity to frankly review strengths and weaknesses and a time to offer feedback regarding the elective experience. At conclusion, the resident will be given a form to evaluate the staff and the elective format.