### **Course: Acute CCU - PMH**

## **MED 1910**

Department: Internal Medicine Course: Parkland Cardiology and CCU Rotation Faculty Coordinator: Robert Morlend, M.D. Course Coordinator: Janis Jessen 214-648-1445 Hospital: Parkland Health and Hospital System Periods offered: 1-12 Length: 4 weeks Max no. of students: 4 First Day Contact: To be designated First Day Time: To be designated First Day Place: To be designated Prerequisites: Passing grade in 3rd year Internal Medicine Clerkship Note: Students may only take time off from this rotation for internship interviews with the permission of the attending faculty.

#### I. COURSE DESCRIPTION:

Students will be an integral part of the Cardiology/CCU team at Parkland hospital. They will be responsible for the direct care of patients under the supervision of the residents, fellow and cardiology faculty. They will gather data and assess patients, formulate patient care plans and implement plans. They will also be able to observe and participate (as directed by their supervisors) in procedures as needed for their patients.

## **II. COURSE GOALS AND OBJECTIVES:**

During this rotation, the students will be expected to meet the following objectives pertaining to :

## A. Patient Care

1. Perform complete cardiovascular history and physical, and to be able to perform and demonstrate physical exam maneuvers to detect common cardiovascular conditions.

2. Synthesize data into a problem list and differential diagnosis

- 3. Formulate diagnostic and therapeutic plan with supervision
- 4. Demonstrate caring and respectful behavior to patients and their families
- 5. Use laboratory testing and radiography appropriately to triage and diagnose

6. Make evidence based decisions based on review of current literature and consultation with residents, fellow and attending physicians.

7. Implement a treatment plan in collaboration with other members of care team including referring physicians, consultants, nurses, social workers, technicians.

## **B. Medical Knowledge**

By the end of this rotation students should be able to demonstrate knowledge of established and evolving fundamental cardiac disorders including ischemic heart disease, congestive heart failure, hypertensive heart disease, valvular heart disease and cardiac arrhythmias. They are expected to:

1. Develop a working knowledge of common cardiovascular disorders (highlighted above) through diagnosis and management of these conditions, clinically-oriented teaching rounds, and faculty/fellow led didactic sessions.

2. Learn concepts of normal cardiovascular physiology and pathophysiology

3. Understand basic principles of ECG interpretation to recognize acute coronary syndromes and arrhythmias.

4. Understand performance characteristics of cardiovascular biomarkers.

5. Understand the basis for common radiology and functional studies, including

CXR, stress tests and echocardiograms, and aquire a general understanding of appropriate testing for common cardiovascular conditions.

6. Appropriately diagnose heart failure and differentiate heart failue from other volume overloaded states. Demonstrate appropriate physical examination skills, and be able to categorize patients according to Stevenson Categories to initiate therapy on the basis of their findings.

7. Understand the role of noninvasive imaging and cardiac biomarkers in the management of heart failure.

8. Achieve a basic understanding of the natural history of valvular disease with and without surgery, and know the indications for surgical therapy

9. Be able to risk stratify for stroke patients with atrial fibrillation and start anticoagulation as dictated by the risk/benefit ratio.

10. Appropriately suspect pericardial tamponade and contact the resident, fellow and faculty for diagnosis and performance of pericardiocentesis when indicated.

# C. Interpersonal and Communication Skills

Students must demonstrate interpersonal and communication skills that result in the effective exchange of information and teaming with patients, their families, and professional associates. Students are expected to:

1. Develop strong language skills with clear communication.

2. Develop strong documentation skills which effectively communicate assessment and plans.

3. Learn to present a case accurately and succinctly

4. Communicate effectively with supervising attending physicians, fellows, residents and interns.

5. Interact with physicians on other services providing consultations when appropriate.

6. Develop an organized approach to communication surrounding transitions of care and post-discharge treatment and plans.

7. Create and sustain a therapeutic relationship with patients. Be able to communicate effectively with patients and families across a broad range of socioeconomic and cultural backgrounds.

8. Be able to clearly and effectively communicate with nursing staff.

9. The attending physician will obtain feedback from the fellows, residents and interns, nurses, and ancillary staff. Attending staff will teach and model effective communication skills and provide frequent and "real time" feedback.

# **D. Practice Based Learning and Improvement**

Students must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning.

They are expected to develop skills and habits to be able to:

1. Develop a willingness to learn from errors to ultimately improve patient care and individual practice.

2. Demonstrate self-initiative access and retrieve materials for self-education regarding cardiac cases.

3. Utilize electronic resources and current literature to generate appropriate diagnostic and therapeutic plans.

4. Constructively respond to and internalize feedback from faculty, nursing, and

housestaff. Demonstrate willingness to change identified behaviors.

5. Use information technology to answer clinical questions

6. Participate in the education of patients and families when appropriate.

### **E. Professionalism**

Students must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles. They are expected to demonstrate:

1. Compassion, integrity, and respect for others.

- 2. Professional appearance.
- 3. Commitment to ethical issues.

4. Response in a timely manner to patient care needs above self-interest.

5. Sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual.

6. Recognition and compassionate response to factors affecting treatment plan, such as patient economic factors, complexities of family care at home, and factors affecting adherence with medical therapy.

7. Respect of patient privacy and autonomy.

The students will demonstrate compassion in interaction with patients and their families as well as respect for the residents and nursing staff. The attending physician will obtain feedback from the fellows, residents, nurses and ancillary staff. Attending staff will teach and model the professional attributes.

## **F. Systems Based Practice**

Students must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care. Students should incorporate considerations of cost awareness and riskbenefit analysis in patient care. They are expected to:

1. Develop knowledge of inpatient cardiology practice and delivery system.

2. Appreciate the importance of cross-disciplinary team care, including communication with consultants and surgical colleagues, in developing comprehensive treatment goals for patients.

3. Assist the housestaff in providing safe cross-cover hand-offs following a standardized template.

4. Observe and understand the triage of patients between the intensive care unit and cardiac telemetry units, as well as other units.

5. Strive to provide cost-effective cardiovascular care. Assist the housestaff in ordering the most appropriate test for the patient's condition, and not order redundant testing or testing that is excessive or not warranted. The fellow, attending physician and housestaff will provide guidance and feedback on the appropriate use of diagnostic testing.

## **III. METHODS OF INSTRUCTION:**

A. Didactic- Dedicated teaching rounds occur Monday, Tuesday and Thursday mornings for 30 mins to 1 hour. These will be taught by the cardiology attending

and/or the cardiology fellow. Topics will be determined by the attending and fellow. Wednesdays are Cardiology Grand Rounds from 7:30 to 8:30. Fridays are Medicine Grand Rounds from 8:00 to 9:00 am.

B. Clinical- Attending rounds are held daily with the team where patients will be presented and care discussed. Teaching will be provided by the cardiology attending and fellow and the UTSW housestaff.

# IV. METHODS OF EVALUATION:

A. Faculty interaction during the clinical rotation with input from house officers of the ward team, nursing and ancillary staff.

B. Full attendance and participation.

C. Grades are Pass or Fail.