Cardiology Curriculum for Internal Medicine Housestaff

I. Critical Care Cardiology

A. ECG Interpretation
   1. Identification of Myocardial Ischemia/Infarction
   2. Rapid Diagnosis of Cardiac Arrhythmia
      i. Bradycardia (heart block, fascicular block)
      ii. SVT (regular versus irregular)
      iii. Wide complex tachycardia (SVT with aberrance vs. VT)

B. Diagnosis and Management of Hypotension
   1. Systematic approach
   2. Understand placement, derivation, and interpretation of PA-Cath numbers.
   3. Mechanism of action and appropriate use of pressors / inotropes

C. Mechanical Ventilation
   1. Become versatile in use of mechanical ventilation
   2. Differentiate between different etiologies of increased peak pressure
   3. Calculate lung compliance and resistance

D. Intra-aortic balloon pump
   1. Understand mechanisms of action
   2. Timing of pump and trouble shooting IABP problems
   3. Understand indications and contraindications of use

E. Transvenous Pacing
   1. Indications
   2. Understand concepts regarding programing TVP

F. Procedures
   1. Proficient in central line placement.
   2. Arterial line placement

II. Coronary Artery Disease

A. Differential diagnosis of chest pain. (Systematic approach)

B. Stable Angina
   1. Definition
   2. Pathophysiology
   3. In-patient management
   4. Stress testing modes. (Method, sensitivity, specificity)

C. Non-ST elevation Acute Coronary Syndromes (ACS)
   1. Definition
   2. Pathophysiology
   3. Risk stratification (TIMI Risk Score)
   4. Use of glycoprotein lib/Illa inhibitors
   5. Use of early invasive strategy

D. STEMI
   1. Definition
2. Pathophysiology
3. Risk Stratification
4. Initial Management
5. Data and indications for thrombolytics
6. Primary PCI
7. Data regarding lytic versus primary PCI
8. CCU management of STEMI patients
9. Complications of MI
10. Secondary Prevention

III. Heart Failure

A. Cardiomyopathy
   1. Etiology
   2. Classification / Staging
B. Heart Failure
   1. Acute CHF management
   2. Chronic CHF management
C. Cardiac Transplantation
D. Mechanical Assist devices

IV. Electrophysiology
A. ICD indications
B. Antiarythmic therapy
C. Chronic Atrial Fibrillation
   1. Mechanism / Classification
   2. Rate versus rhythm control
   3. Anticoagulation
D. Acute Atrial Fibrillation / flutter
   1. Rate control
   2. Etiologies
   3. Anticoagulation
   4. Rhythm control
E. Ventricular Tachycardia
F. Syncope: diagnosis and work-up

V. Valvular Heart Disease
A. Aortic Stenosis
B. Aortic Regurgitation
C. Mitral Stenosis
D. Mitral Regurgitation

VI. Other Cardiac Disorders
A. Aortic Dissection
B. Hypertensive Emergency / Urgency
C. Flash pulmonary edema
D. Endocarditis
E. Cardiac Tamponade