

Everything ECG and Cardiac Rhythm Boot Camp

Course Outline

Day 1: October 7 2019

- **Foundational ECG Concepts**
 - Anatomy of a 12 Lead ECG
 - Recording of Leads
 - Normal & Abnormal Waveforms
 - QRS Axis
 - Bundle Branch Blocks
 - Hemiblocks
 - Hypertrophies / ECG in hypertrophic cardiomyopathy
- **Normal Variants**
 - Early repolarization
 - Persistent juvenile T waves
- **Medication and Electrolyte Effects**
 - Potassium
 - Calcium
 - Digoxin
 - Class I and III antiarrhythmics
- **Wide Complex Tachycardias**
 - Use of ECG criteria for differentiating SVT with aberrancy from VT
 - Hospital monitoring guidelines / practice recommendations for dysrhythmias
 - Ventricular arrhythmia and sudden cardiac death guideline updates
 - Torsades and QT interval monitoring
 - Long QT syndrome
 - Brugada syndrome

Day 2: October 8 2019

- **The ECG and Injury and Ischemia**

- ECG changes in response to injury, ischemia and infarction
- 3 Rules for Advanced ECG reading
- Q waves
- Nuances of specific types of MI
- Right ventricular and posterior leads
- ECG interpretation with BBB
- Evolutionary changes in STEMI
- Complications of STEMI
- ST segment monitoring case studies

- **Myocardial Mimics**

- Pericarditis
- Aortic dissection
- Pulmonary Embolus
- Subarachnoid hemorrhage

- **ECG Pearls**

- SVT and supply and demand ischemia
- T wave memory
- ECG recognition of accessory pathways
- The Lewis Lead in atrial arrhythmias

- **Bradyarrhythmias**

- Recognition and management
- Clinical practice guideline updates
- Basic concepts of pacemaker technology
- Chronotropic incompetence in heart failure