## Mayo Clinic 7th Annual Heart Rhythm & ECG Course: A Case based approach
### December 6 - 9, 2018

**Thursday, December 6, 2018**

### ECG Reading Course

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Presenter</th>
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<tbody>
<tr>
<td>6:50 a.m.</td>
<td>Registration and Continental Breakfast</td>
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<tr>
<td>7:15</td>
<td>Welcome and Introduction</td>
<td>Komandoor Srivathsan, MD</td>
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<td>7:30</td>
<td>Bundle Branch Blocks</td>
<td>Stephen Hammill, MD</td>
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<td>7:55</td>
<td>SVT Basics and Differential Diagnosis</td>
<td>Win-Kuang Shen, MD</td>
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<td>8:20</td>
<td>Aberrancy or Ventricular Tachycardia: Improved diagnostic certainty</td>
<td>Dan Sorajja, MD</td>
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<td>8:45</td>
<td>Localizing VT: Outflow tract vs apical/ epicardial vs endocardial</td>
<td>Komandoor Srivathsan, MD</td>
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<td>9:10</td>
<td>Q&amp;A</td>
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<td>9:30</td>
<td>Break</td>
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<td>10:00</td>
<td>AV Node vs His-Purkinje Disease</td>
<td>Stephen Hammill, MD</td>
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<td>10:25</td>
<td>Chamber Abnormalities and Diagnostic Changes</td>
<td>Siva Mulpuru, MD</td>
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<td>10:50</td>
<td>A flutter, Pre-excited Atrial Fibrillation, and Torsade</td>
<td>Stephen Hammill, MD</td>
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<td>11:15</td>
<td>Metabolic Changes, Ion Channel Problems and Unusual Problems</td>
<td>Luis Scott, MD</td>
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<td>11:40</td>
<td>Stress ECG Change: When is it diagnostic?</td>
<td>Komandoor Srivathsan, MD</td>
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<td>12:15</td>
<td>Q&amp;A</td>
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<td>12:30</td>
<td>Lunch on your own</td>
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<td><strong>1:00 – 3:00</strong></td>
<td><strong>Optional Additional ECG Workshop</strong></td>
<td><strong>Presenters:</strong> Stephen Hammill, MD; Win-Kuang Shen, MD; Siva Mulpuru, MD; Dan Sorajja MD; Komandoor Srivathsan, MD</td>
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<td>Lunch provided to optional registrants</td>
<td><strong>Presenter:</strong> Stephen Hammill, MD</td>
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<td>Code ECGs with Stephen Hammill, MD (useful for Cardiology board examination)</td>
<td><strong>Live interactive session</strong></td>
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**Atrial Fibrillation**  
Moderator: John Miller, MD

7:30 a.m.  Atrial Fibrillation: Sleep apnea and risk factor changes - A Case review  
John Miller, MD

7:55  Rate Control Options: Medications and AV nodal ablation - Does strict rate control matter?  
Win-Kuang Shen, MD

8:20  Guideline Directed Medications for Maintaining Sinus Rhythm.  
John Miller, MD

8:45  Optimal Cases for Ablation  
Komandoor Srivathsan, MD

9:10  Stroke in Atrial Fibrillation - Guidelines for Anticoagulation  
Fred Kusomoto, MD

9:35  Panel Discussion

10:00  Break

10:30  Thoracoscopic LV lead Placement before AV Nodal Ablation: if CS lead cannot be placed?  
Dawn Jaroszewski, MD

10:55  Atrial Fibrillation – Debates  
Moderator: Stephen Hammill, MD

**Pro:** Anticoagulation: Coumadin is the best if TTRs are great  
Fred Kusomoto, MD

**Con:** Newer anticoagulants are better than Coumadin  
Dan Sorajja, MD

11:30  Pro: Ablation should be first line therapy  
Win-Kuang Shen, MD

**Con:** Ablation should only be performed if medications fail  
John Miller, MD

12:00  Watchman device debate

**Pro:** WATCHMAN device is useful and should continue to be used  
Thomas Munger, MD

**Con:** Should not be used  
Komandoor Srivathsan, MD

12:30  Reversal of bleeding episodes with NOACs  
Dan Sorajja, MD

Lunch on your own

1:00 – 3:00  **Optional workshop: Challenging ECGs** (lunch provided to optional attendees)  
Presenter(s): Stephen Hammill, MD, and Komandoor Srivathsan, MD  
Panel: Siva Mulpuru, MD, and Dan Sorajja, MD
6:50 a.m. Continental Breakfast

7:00 Early Bird Special Session
    Review of Interesting ECGs
    Komandoor Srivathsan, MD

    **Ventricular Arrhythmias**
    Moderator: Kenneth Ellenbogen, MD

7:30 Implantable Defibrillator Primary Prevention of Sudden Death: What do the guidelines say?
    Kenneth Ellenbogen, MD

7:55 Sudden Death in the Young - evaluation
    John Miller, MD

8:20 Incessant VT: How did I manage? A Case review
    Fred Kusomoto, MD

8:50 PVCs and Cardiomyopathy: A case review.
    Win-Kuang Shen, MD

9:15 Panel Discussion

9:30 Break

10:00 Channelopathies: What should a generalist know?
    Komandoor Srivathsan, MD

10:25 Wearable Defibrillator
    Dan Sorajja MD

10:50 Pacemaker and MRI
    Win-Kuang Shen, MD

11:20 Basic Pacemaker/ICD trouble shooting in the ED
    Kenneth Ellenbogen, MD

11:50 Case Based Workshop:
    Moderator: Dan Sorajja MD, and Win-Kuang Shen, MD

    **First Case:** Monomorphic VT, 10 years following inferior MI in 65 yr. old male: How did I manage with subsequent clinical course?
    **Second case:** 28 year old male with syncope and Outflow tract VT; how did I manage with subsequent course?
    Siva Mulpuru, MD

12:30 Lunch on your own

1:00 – 3:00 Optional Intracardiac Electrogram Case Based Workshop
(20 minutes each)

    Panelists: Drs. Siva Mulpuru, MD; Luis Scott, MD; McLeod and Dan Sorajja, MD, Linda Schwartz

    Presenters: Dr K Srivathsan, Robert Fisher and Paul Bibby
Sunday, December 9, 2018

6:50 a.m.  Continental Breakfast

7:00   Early Bird Special Session: Learning from the 12-lead ECG
       Win-Kuang Shen, MD
       Moderator: Komandoor Srivathsan, MD

7:30  POTS and Inappropriate Sinus Tachycardia Cases; How did I manage?
      Win-Kuang Shen, MD

7:55  Anticoagulation Management in Patients Undergoing Procedures with Warfarin and NOACs
      Dan Sorajja, MD

8:20  Exertional Syncope of the Young (<40 Yrs of age) - Case review
      Luis Scott, MD

8:45  Event recorder, Holter or Implantable Loop Recorder: Case examples of which should one choose?
      Dan Sorajja, MD

9:10  Panel Discussion

9:30  Break

10:00 Sudden Death in HCM and Screening
       Thomas Munger, MD

10:25 Heart failure and Biventricular Devices: What is the data?
       Siva Mulpuru, MD

10:50 Remote Monitoring helped these Patients in Heart Failure - Review of cases
       Linda Schwartz

11:15 SVT and Atrial Flutter in CHF Patients
       Case reviews
       Komandoor Srivathsan, MD

11:40 Closing Remarks