6th Annual
LEAD MANAGEMENT UPDATE
SYMPOSIUM

Saturday
December 7, 2019

Orin Smith Auditorium
UW Medicine, South Lake Union
850 Republican Street | Seattle, WA 98109

Sponsored by UW School of Medicine
Department of Medicine, Division of Cardiology
Office of Continuing Medical Education
WHO SHOULD ATTEND
This meeting is intended for Cardiologists, electrophysiologists, cardiothoracic surgeons, advanced practice providers (ARNP’s, PA’s), nurses, cardiovascular technicians and primary care physicians.

COURSE DESCRIPTION
This course is designed to provide the learner with the most up to date review of cardiac implantable electronic device lead management. Topics covered include indications for lead extraction, clinical decision making in patients with CIED infections or lead malfunction. An in-depth review of indications for lead extraction will be covered, as well as a description of available tools and technology used for lead extraction. Experts in lead management and extraction will discuss cases which illustrate the educational goals. Didactic sessions will be combined with interactive case presentations.

COURSE OBJECTIVES
Upon completion of this activity, attendees should be able to:

• Manage patients who experience CIED complications, including advisory or recall devices and infection.
• Recognize when to refer to a specialist.
• Describe updates in published literature, guidelines and consensus documents.
• Identify methods to prevent complications from CIEDs, to include reviewing the efficacy of lead extraction and appropriate device implantation.

ACCREDITATION
Accreditation with Commendation
The University of Washington School of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

Credit Designation
The University of Washington School of Medicine designates this live activity for a maximum of 6.5 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

COURSE FEES
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<tr>
<td>MD/DO/PhD</td>
<td>$200.00</td>
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<td>Allied Health</td>
<td>$150.00</td>
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Walk-in registrations incur a $25 administrative fee

The fee for this course includes catering, all instruction materials and transcript of AMA PRA Category 1 Credits™. To ensure enrollment, please complete the enclosed registration form and forward it with the appropriate tuition or register online at uwcme.org. Allow up to fifteen working days to receive your email confirmation of enrollment. If you have not received confirmation prior to your departure for the course, please contact the Continuing Medical Education office at 206.543.1050. Continuing Medical Education will not be responsible for expenses incurred by an individual who is not confirmed and for whom space is not available at the course.

ATTENDANCE POLICY
Course activities are exclusively reserved for course attendees. Badges provided at registration are required for entrance into all functions and will be strictly enforced.
Course Faculty

PROGRAM CO-DIRECTORS

Ulrika Birgersdotter-Green, MD
Director, Pacemaker and ICD Services
University of California
San Diego, CA

Kristen Patton, MD
Professor of Medicine, Division of Cardiology
University of Washington
Seattle, WA

Noel Boyle, MD, PhD
Professor of Medicine
University of California
Los Angeles, CA

Jeanne Poole, MD
Professor of Medicine, Division of Cardiology
University of Washington
Seattle, WA

PROGRAM FACULTY

Jamil Bashir, MD
Clinical Associate Professor
University of British Columbia
Vancouver, BC

Andrew Krahn, MD, FHRs
Chief of Cardiology
University of British Columbia
Vancouver, BC

Peter Belott, MD, FACC, FHRs
Cardiologist
Sharp Grossmont Hospital
San Diego, CA

Lyle Larson, PA-C, PhD
Teaching Associate, Division of Cardiology
University of Washington
Seattle, WA

Eric Buch, MD, MS
Associate Professor of Medicine
Director, Electrophysiology Lab
University of California
Los Angeles, CA

Jennifer Miller, BSci, BFA, MBA
Minneapolis, MN

Roger Carrillo, MD
Professor of Surgery
Chief, Surgical Electrophysiology
Palmetto General Hospital
Miami, FL

Paul Pottinger, MD, FACP, FIDSA
Professor of Medicine
University of Washington
Seattle, WA

Thomas Dewland, MD
Assistant Professor
Oregon Health and Science University
Portland, OR

Victor Pretorius, MD
Associate Clinical Professor of Surgery
Surgical Director of Heart Transplant
Director, Mechanical Circulatory Support
University of California
San Diego, CA

Roger Freedman, MD
Professor of Medicine
University of Utah
Salt Lake City, UT

Jordan Prutkin, MD, MHS
Associate Professor of Medicine
University of Washington
Seattle, WA

Charles Henrikson, MD
Professor of Medicine
Director, Electrophysiology Service
Oregon Health and Science University
Portland, OR

Charles Swerdlow, MD, FAHA, FHRs
Clinical Professor of Medicine
University of California
Los Angeles, CA

Kevin Koomalsingh, MD
Assistant Professor of Surgery
University of Washington
Seattle, WA

Bruce Wilkoff, MD
Director
Cardiac Pacing & Tachyarrhythmia Devices
Cleveland Clinic
Cleveland, OH
### Conference Schedule

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tr>
<td>7:30</td>
<td>Registration and Continental Breakfast</td>
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<tr>
<td></td>
<td><strong>Morning Chairs: Kristen Patton, MD and Ulrika Birgersdotter-Green, MD</strong></td>
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<tr>
<td>7:55</td>
<td>Introduction and Welcome- Kristen Patton, MD</td>
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<tr>
<td>8:00</td>
<td>Updates from Society Consensus Documents on Lead Management and Lead Extraction- Bruce Wilkoff, MD</td>
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<td>8:30</td>
<td><strong>Lead and Device Malfunction</strong></td>
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<tr>
<td></td>
<td>How are leads made and how do they fail? Jennifer Miller, BSci, BFA, MBA</td>
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<td>Diagnosing lead failure on device interrogation - Charles Swerdlow, MD</td>
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<td>Choice in the management of a malfunctioning lead - Kristen Patton, MD</td>
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<td>9:15</td>
<td>Discussion</td>
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<td>9:30</td>
<td><strong>Device Infections</strong></td>
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<td>CIED Infections, what is the true risk?- Jordan Prutkin, MD</td>
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<td>Diagnosis of CIED Infection- Thomas Dewland, MD</td>
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<td>Microbiology of CIED Infections and Antibiotic Prevention- Paul Pottinger, MD</td>
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<td>Preventive Strategies to Avoid CIED Infections- Surgical Implant Techniques- Peter Belott, MD</td>
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<td>10:15</td>
<td>Discussion</td>
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<tr>
<td>10:30</td>
<td>Break</td>
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<tr>
<td>10:45</td>
<td><strong>Tools and Techniques for Safe and Effective Lead Extraction</strong></td>
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<td>Laser, Mechanical Sheaths or Both- When to Use Which Technique- Eric Buch, MD</td>
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<td>Extracting Leads Using the Femoral Approach- Roger Freedman, MD</td>
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<td>Surgical Approaches or Novel Extraction Procedure Tools- Roger Carillo, MD</td>
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<td>Use of Additional or Novel Extraction Procedure Tools- Jamil Bashir, MD</td>
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<td>Tips and Tricks for Multiple Challenging Leads- Noel Boyle, MD</td>
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<td>11:45</td>
<td>Discussion</td>
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<td>12:00</td>
<td>Lunch (provided)</td>
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<td><strong>Afternoon Chairs: Jeanne Poole, MD and Noel Boyle, MD</strong></td>
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<td>12:45</td>
<td>Video Taped Cases and Discussions</td>
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<td>Commentators: Roger Carillo, MD; Bruce Wilkoff, MD;</td>
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<td>Roger Freedman, MD; Kevin Koomalsingh, MD</td>
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<td>1:45</td>
<td><strong>How to Build a Successful Lead Extraction Program</strong></td>
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<td>Team Approach to Lead Extraction- Ulrika Birgersdotter-Green, MD</td>
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<td>Management of the Lead Extraction Complication- Victor Pretorius, MD</td>
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<td>Management of the Post-Extraction Patient Charles Henrikson, MD</td>
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<td>Perspectives from the Advanced Practice Provider- Lyle Larson, PA-C, PhD</td>
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<td>2:30</td>
<td>Discussion</td>
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The following hotels are located near the conference site. To make reservations, please call the hotels directly. No room block has been reserved.

**Residence Inn by Marriott**
800 Fairview Ave N
Seattle, WA 98109
206.624.6000

**Staybridge Suites Seattle**
1119 Mercer Street
Seattle, WA 98109
206.596.2301

**Conference Schedule (continued)**

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8:30  Lead and Device Malfunction

  How are leads made and how do they fail? Jennifer Miller, BSci, BFA, MBA
  Diagnosing lead failure on device interrogation - Charles Swerdlow, MD
  Choice in the management of a malfunctioning lead - Kristen Patton, MD
  Cyber security- fact or fiction? - Andrew Krahn, MD

9:15  Discussion

9:30  Device Infections

  CIED Infections, what is the true risk?- Jordan Prutkin, MD
  Diagnosis of CIED Infection- Thomas Dewland, MD