General Information

Learning Objectives
At the conclusion of this activity, participants should be able to:

1. Differentiate the important features of the various etiologies of pulmonary hypertension.
2. Describe the accepted therapies for pulmonary hypertension and pulmonary embolism and their indications.
3. Explain the management of patients with pulmonary hypertension in accordance with accepted clinical guidelines.
4. Recognize when patients have suboptimal response to treatments and be aware of what advanced treatments are available.
5. Discuss the treatment strategies of acute right ventricle failure in critically ill patients with chronic pulmonary hypertension.

Target Audience
This continuing medical education program is designed to meet the educational needs of cardiologists, pulmonologists, internal medicine, hospitalists, advanced practice nurses, registered nurses, physician assistants, pharmacists, cardiology and pulmonary medicine fellows and residents in training.

Conference Location
This program will be held at Gallery at GreenRiver located on the 18th floor of the Lavin Family Pavilion at 259 E. Erie Street, Chicago Illinois 60611. Please contact the Gallery at GreenRiver at (312) 337-0100 or www.greenriverchi.com/gallery for directions and parking information.

Accreditation Statement
The Northwestern University Feinberg School of Medicine is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

Credit Designation Statement
The Northwestern University Feinberg School of Medicine designates this live activity for a maximum of 7.5 AMA PRA Category 1 Credit(s)™. Physicians should claim only credit commensurate with the extent of their participation in the activity.

Other Credits: The American Academy of Nurse Practitioners and the American Nurses Credentialing Center accept AMA PRA Category 1 Credit(s)™ from organizations accredited by the ACCME.

Registration
You may register on-line at: www.cme.northwestern.edu. An email confirmation will be sent once your registration is complete. If you do not receive a confirmation, please contact the Office of CME at 312-503-8533. Registrations can also be mailed with a check made payable to Northwestern University. Registrations will not be accepted by telephone.

Cancellation Policy
Cancellations must be made in writing to the Office of Continuing Medical Education. The paid registration fee, minus a $50 administrative charge, will be refunded if cancellation is received by July 15, 2016.

Special Needs
The Feinberg School of Medicine fully intends to comply with the legal requirements of the Americans with Disabilities Act. If any participant of this conference is in need of accommodation please indicate those needs on the registration form or submit written requests to the Office of CME at least one month prior to the conference date.

Additional Information
Contact the Northwestern University, Feinberg School of Medicine, Office of Continuing Medical Education, phone: 312-503-8533, Fax: 312-503-4531, email: cme@northwestern.edu or visit our website at: www.cme.northwestern.edu.
<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Speaker(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 - 8:05 am</td>
<td>Opening remarks</td>
<td>Stuart Rich, MD</td>
</tr>
<tr>
<td>8:05 - 8:20 am</td>
<td>What is pulmonary hypertension?</td>
<td>Michael Cuttica, MD</td>
</tr>
<tr>
<td>8:20 - 8:45 am</td>
<td>Diagnosing pulmonary hypertension before it’s too late.</td>
<td>Sanjiv Shah, MD</td>
</tr>
<tr>
<td>8:45 - 9:00 am</td>
<td>Discussion and Audience Q&amp;A</td>
<td></td>
</tr>
<tr>
<td>9:00 - 9:20 am</td>
<td>Advances in the medical treatment of pulmonary arterial hypertension</td>
<td>Hector Cajigas, MD</td>
</tr>
<tr>
<td>9:20 - 9:35 am</td>
<td>Discussion and Audience Q&amp;A</td>
<td></td>
</tr>
<tr>
<td>9:35 - 9:55 am</td>
<td>The importance of pulmonary hypertension in patients with systolic left heart failure</td>
<td>Jonathan Rich, MD</td>
</tr>
<tr>
<td>9:55 - 10:10 am</td>
<td>Discussion and Audience Q&amp;A</td>
<td></td>
</tr>
<tr>
<td>10:10 - 10:25 am</td>
<td>Break and Exhibits</td>
<td></td>
</tr>
<tr>
<td>10:25 - 10:45 am</td>
<td>The mystery of pulmonary hypertension in heart failure with preserved ejection fraction</td>
<td>Sanjiv Shah, MD</td>
</tr>
<tr>
<td>10:45 - 11:00 am</td>
<td>Discussion and Audience Q&amp;A</td>
<td></td>
</tr>
<tr>
<td>11:00 - 11:20 am</td>
<td>Options for the patient with advanced pulmonary hypertension: Atrial septostomy and lung transplantation</td>
<td>Hector Cajigas, MD</td>
</tr>
<tr>
<td>11:20 - 11:35 am</td>
<td>Discussion and Audience Q&amp;A</td>
<td></td>
</tr>
<tr>
<td>11:35 am - 12:00 pm</td>
<td>Case Presentations</td>
<td>Presenter: Michael Cuttica, MD Panel: Drs. Hector Cajigas, Jonathan Rich, Sanjiv Shah</td>
</tr>
<tr>
<td>12:00 - 1:00 pm</td>
<td>Lunch and Exhibits</td>
<td></td>
</tr>
<tr>
<td>1:00 - 1:25 pm</td>
<td>The treatment of acute right heart failure in chronic pulmonary hypertension</td>
<td>Stuart Rich, MD</td>
</tr>
<tr>
<td>1:25 - 1:40 pm</td>
<td>Discussion and Audience Q&amp;A</td>
<td></td>
</tr>
<tr>
<td>1:40 - 2:05 pm</td>
<td>A practical approach in managing pulmonary hypertension in patients with COPD and interstitial lung disease</td>
<td>Michael Cuttica, MD</td>
</tr>
<tr>
<td>2:05 - 2:20 pm</td>
<td>Discussion and Audience Q&amp;A</td>
<td></td>
</tr>
<tr>
<td>2:20 - 2:40 pm</td>
<td>Pulmonary hypertension and acute pulmonary thromboembolism</td>
<td>Daniel Schimmel, MD</td>
</tr>
<tr>
<td>2:40 - 2:55 pm</td>
<td>Discussion and Audience Q&amp;A</td>
<td></td>
</tr>
<tr>
<td>2:55 - 3:10 pm</td>
<td>Break and Exhibits</td>
<td></td>
</tr>
<tr>
<td>3:10 - 3:30 pm</td>
<td>Pulmonary hypertension and chronic pulmonary thromboembolism</td>
<td>S. Chris Malaisrie, MD</td>
</tr>
<tr>
<td>3:30 - 3:45 pm</td>
<td>Discussion and Audience Q&amp;A</td>
<td></td>
</tr>
<tr>
<td>3:45 - 4:10 pm</td>
<td>Interventional technologies in treating advanced pulmonary hypertension: CardioMems monitoring; Tricuspid valvuloplasty; ECMO and VADs; Pulmonary artery denervation</td>
<td>Jonathan Rich, MD</td>
</tr>
<tr>
<td>4:10 - 4:25 pm</td>
<td>Discussion and Audience Q&amp;A</td>
<td></td>
</tr>
<tr>
<td>4:55 - 5:00 pm</td>
<td>Concluding remarks</td>
<td>Stuart Rich, MD</td>
</tr>
</tbody>
</table>
Faculty Disclosure

Northwestern University Feinberg School of Medicine (NUFSM) requires course directors, speakers, instructors, planners, and other individuals who are in a position to control the content of this activity to disclose any relevant financial relationships. All identified potential conflicts of interest are thoroughly vetted by NUFSM for fair balance, scientific objectivity of studies mentioned in the materials or used as the basis for content, and appropriateness of patient care recommendations. The faculty disclosures and the discussion off-label usage will be indicated in the course syllabus.

Northwestern University Feinberg School of Medicine Faculty

Course Directors

Michael Cuttica, MD
Associate Director, Pulmonary Vascular Disease Program
Northwestern Memorial Hospital
Assistant Professor of Medicine - Pulmonary

Stuart Rich, MD
Director, Pulmonary Vascular Disease Program
Bluhm Cardiovascular Institute
Northwestern Memorial Hospital
Professor of Medicine - Cardiology

Speakers

Hector Cajigas, MD
Department of Transplant Pulmonology
Northwestern Memorial Hospital
Assistant Professor of Medicine - Pulmonary

S. Chris Malaisrie, MD
Surgical Director, Bicuspid Aortic Valve Program
Bluhm Cardiovascular Institute
Northwestern Memorial Hospital
Associate Professor of Surgery - Cardiac Surgery

Jonathan Rich, MD
Medical Director, Mechanical Circulatory Support Program
Bluhm Cardiovascular Institute
Northwestern Memorial Hospital
Assistant Professor of Medicine - Cardiology

Daniel Schimmel, MD, MS
Director, Acute Pulmonary Embolism Response Team
Bluhm Cardiovascular Institute
Northwestern Memorial Hospital
Assistant Professor of Medicine- Interventional Cardiology

Sanjiv Shah, MD
Director, Heart Failure with Preserved Ejection Fraction Program
Bluhm Cardiovascular Institute
Northwestern Memorial Hospital
Associate Professor of Medicine- Cardiology

For additional information, contact the Northwestern University, Feinberg School of Medicine, Office of Continuing Medical Education, phone: 312-503-8533, Fax: 312-503-4531, email: cme@northwestern.edu or visit our website at: cme.northwestern.edu.
Registration

□ Physician ................................................................. $200
□ Nurses .................................................................... $100
□ Fellows or Residents in Training ............................................. $0
*Must provide a letter from program director to receive complimentary registration.

How to Register

ONLINE – cme.northwestern.edu

OR mail with check to (Make check payable to Northwestern University)

Northwestern University
Feinberg School of Medicine
Office of Continuing Medical Education
240 E. Huron, Ste. 1-200
Chicago, IL 60611

The registration fee includes: A continental breakfast, lunch, refreshment breaks, and the course handout.

Registrations will not be accepted by telephone. Please note that credit cards cannot be accepted for on-site registrations. On-site registrations must be made with a check.

Please type or print

Last Name: ____________________________________________________________  Degree: _____________

First Name: ______________________________________________________________

Institution: _________________________________________________________________________________

Address: ___________________________________________________________________________________

City:___________________________________________________  State:________  Zip code: _____________

Daytime Phone:____________________________________  Fax: ____________________________________

E-mail: ______________________________________________________________ (required – your confirmation and receipt will be emailed)

Specialty: __________________________________________________________________________________

Please indicate any special needs: _______________________________________________________

Please indicate any dietary needs: _____________________________________________________________

For questions regarding registration please contact the Office of Continuing Medical Education at cme@northwestern.edu or 312-503-8533. Cancellations must be made in writing via email. The paid registration fee, minus a $50 administrative charge, will be refunded. No refunds will be granted after July 15, 2016.
Advances in Pulmonary Hypertension
August 5, 2016
Chicago, Illinois