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

1. Recognize when patients have suboptimal response to treatments and be aware of what advanced treatments are available.
2. Identify the imaging features that indicate operability in CTEPH patients.
3. Acknowledge the overlap in the use of BPA and PEA in patients with segmental CTEPH disease dependent on institutional experience and hence the uncertainty in the current guidelines.
4. Recognize the advanced technical endarterectomy procedure and care of patients with peroperative complications.
5. Explain how to risk stratify patients with advanced right heart failure in order to assess optimally time mechanical circulatory support (MCS) implantation.
6. Recognize the various types of MCS support available for patients with advanced right heart failure and the technological differences that may impact pump selection and patient/device management.
7. Explain how to evaluate and list potential candidates for lung transplantation.
8. Discuss perioperative management of the donor, lung procurement and operative strategies including use of extracorporeal life support and ex-vivo lung perfusion.
9. Recognize the most common post-transplant complications.
10. Identify the challenges during the diagnosis and management of complex cardiogenic shock patients and the potential benefits of a multidisciplinary team approach.
11. Name the diagnostic and therapeutic challenges of early and late RV failure.
12. Develop an understanding of ECMO placement, management, and explant in combination with lung transplantation.

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

Conference Location
This program will be held at Northwestern Medicine Prentice Women's Hospital, 3rd Floor, Conference Room 1, located at 250 E Superior, Chicago Illinois 60611. Please visit www.nm.org/locations/prentice-womens-hospital 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.

Hotel
Rooms have been reserved at the Hyatt Centric Chicago Magnificent Mile and will be available for a special symposium rate of $239.00 (single/double occupancy), plus 17.4% tax. The Hyatt Centric is located at 633 N. St. Clair Street, Chicago, IL. Please contact the Hyatt directly at (888) 591-1234 or go to https://book.passkey.com/go/NWMSMEEProgramRoomBlock to make reservations. To receive the reduced room rate, reservations must be made by July 5, 2018. Reservations made after July 5th are subject to availability at regular hotel rates. The room block may fill prior to the cutoff dates, so be sure to make your arrangements early.

Registration
You may register online at: http://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 13, 2018.

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</th>
<th>Speaker(s)</th>
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<tr>
<td>8:00-8:05</td>
<td><strong>Opening remarks</strong></td>
<td>Stuart Rich, MD</td>
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<td><strong>MORNING</strong></td>
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<tr>
<td>8:05-8:25</td>
<td>The Falling Right Ventricle: What Are the Options?</td>
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<td>Management Dilemmas in Treating Acute Right Ventricular Failure from Pulmonary Hypertension</td>
<td>Stuart Rich, MD</td>
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<td>8:25-8:35</td>
<td>Discussion</td>
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<tr>
<td>8:35-9:00</td>
<td>Cardiogenic Shock from Right Ventricleal Failure: Mechanical Support Options</td>
<td>Duc Thinh Pham, MD</td>
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<td>9:00-9:15</td>
<td>Discussion</td>
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<td>9:15-9:35</td>
<td>Lung Transplantation for Advanced Pulmonary Hypertension: Is It Still the Last Resort?</td>
<td>Hector Cajigas, MD</td>
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<td>9:35-9:45</td>
<td>Discussion</td>
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<td>9:45-10:05</td>
<td>Break</td>
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<td>10:05-10:25</td>
<td>Pulmonary Hypertension in the Adult with Congenital Heart Disease</td>
<td>Stuart Berger, MD</td>
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<td>10:25-10:35</td>
<td>Discussion</td>
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<td>10:35-11:00</td>
<td>Pulmonary Hypertension with HFpEF: Does It Matter theType?</td>
<td>Sanjiv Shah, MD</td>
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<td>11:00-11:10</td>
<td>Discussion</td>
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<td>11:10-12:00</td>
<td><strong>Tough Cases</strong></td>
<td>Michael Cuttica, MD, Stuart Rich, MD, Sanjiv Shah, MD</td>
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<td>12:00-1:00</td>
<td>Lunch</td>
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<td><strong>AFTERNOON</strong></td>
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<tr>
<td>1:00-1:45</td>
<td>Acute Pulmonary Embolism: The PERT Approach</td>
<td>Michael Cuttica, MD, Dan Schimmel, MD, Mark Courtney, MD, Karlyn Martin, MD</td>
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<tr>
<td>1:45-2:05</td>
<td>CTEPH: Medical Management</td>
<td>Jonathan Rich, MD</td>
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<td>2:05-2:15</td>
<td>Discussion</td>
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<td>2:15-2:40</td>
<td>CTEPH: Balloon Pulmonary Angioplasty</td>
<td>Dan Schimmel, MD</td>
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<td>2:40-2:50</td>
<td>Discussion</td>
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<td>2:50-3:10</td>
<td>Break</td>
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<tr>
<td>3:10-3:30</td>
<td>CTEPH: Pulmonary Endarterectomy</td>
<td>Chris Malaisrie, MD</td>
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<td>3:30-3:40</td>
<td>Discussion</td>
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<td>3:40-4:00</td>
<td>Review of the 2017 World Symposium on Pulmonary Hypertension</td>
<td>Hector Cajigas, MD</td>
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<td>4:00-4:10</td>
<td>Discussion</td>
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<td>4:10-5:00</td>
<td>Tough Cases</td>
<td>Stuart Rich, MD, Michael Cuttica, MD, Dan Schimmel, MD, Jonathan Rich, MD</td>
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<tr>
<td>5:00</td>
<td>Concluding Remarks</td>
<td>Stuart Rich, MD</td>
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Facility 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.

Program Director

Stuart Rich, MD
Professor of Medicine
Director, Pulmonary Vascular Disease Program
Bluhm Cardiovascular Institute

Michael Cuttica, MD
Assistant Professor of Medicine
Associate Director, Pulmonary Vascular Disease Program

Northwestern University Feinberg School of Medicine Faculty

Stuart Berger, MD
Professor of Pediatrics
Executive Director, Heart Center
Interim Division Head, Cardiology
Lurie Children’s Hospital

Hector Cajigas, MD
Associate Professor of Medicine
Associate Division Head for Clinical Operations
Division of Pulmonary and Critical Care Medicine

D. Mark Courtney, MD
Associate Professor of Emergency Medicine and Medical Social Sciences
Department of Emergency Medicine

S. Chris Malaisrie, MD
Associate Professor of Surgery
Surgical Director, Bicuspid Aortic Valve Program and Pulmonary Endarterectomy Team
Bluhm Cardiovascular Institute

Karlyn A. Martin, MD
Assistant Professor of Medicine
Division of Hematology/Oncology

Duc Thinh Pham, MD
Associate Professor of Surgery
Surgical Director, Center for Heart Failure, Heart Transplantation and Mechanical Circulatory Support
Bluhm Cardiovascular Institute

Jonathan Rich, MD
Associate Professor of Medicine
Medical Director, Mechanical Circulatory Support Program
Bluhm Cardiovascular Institute

Daniel Schimmel, MD, MS
Assistant Professor of Medicine
Director, Pulmonary Embolism Response Team
Bluhm Cardiovascular Institute

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

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: www.cme.northwestern.edu