



Advanced Critical Care Echocardiography: A Hands-On Course

We gratefully acknowledge the follow companies for their (financial/in-kind) support:

Start Date: October 18, 2025

End Date: October 18, 2025

Title: Advanced Critical Care Echocardiography: A Hands-On Course

Chair: Yonatan Y. Greenstein, MD, FCCP

Co-Chair(s): Paul H. Mayo, MD, FCCP

Date: October 18, 2025

Location: Convention Center Room, McCormick Place Lakeside Center, Room 353B

Time	Presentation Title	Location
6:30 AM – 7:30 AM	Continental Breakfast (Located in Room E450)	
7:30 AM – 7:45 AM	Welcome and Introduction <i>Yonatan Y. Greenstein, MD, FCCP; Paul H. Mayo, MD, FCCP</i>	
7:45 AM – 8:15 AM	Principles of Doppler <i>Harald Sauthoff, MD, FCCP</i>	
8:15 AM – 9:00 AM	Assessment of Left Ventricular Function <i>Paul H. Mayo, MD, FCCP</i>	
9:00 AM – 9:45 AM	Identification of Fluid Responsiveness and Tolerance <i>Paul H. Mayo, MD, FCCP</i>	
9:45 AM – 10:00 AM	Break	
10:00 AM – 10:30 AM	Assessment of Filling Pressures and Diastolic Function <i>Yonatan Y. Greenstein, MD, FCCP</i>	
10:30 AM – 11:00 AM	Assessment of Valve Function <i>Harald Sauthoff, MD, FCCP</i>	
11:00 AM – 11:30 AM	Assessment of Right Ventricular Function <i>Paul H. Mayo, MD, FCCP</i>	
11:30 AM – 12:00 PM	Critical Care Transesophageal Echocardiography <i>Michel Boivin, MD, FCCP</i>	
12:00 PM – 12:30 PM	National Board of Echocardiography Certification in ACCE <i>Paul H. Mayo, MD, FCCP</i>	
12:30 PM – 1:30 PM	Lunch (Located in Room E450)	
1:30 PM – 5:30 PM	Image Interpretation Room 1	
	Group A	<i>Paul H. Mayo, MD, FCCP</i> General Session Room 353B
	Image Interpretation Room 2	
	Group B	<i>Yonatan Y. Greenstein, MD, FCCP</i> Lakeside-Hall E, Simulation Center, Room U1
	Image Acquisition	
	Group C1	<i>Sam Acquah, MBBS, FCCP</i> General Session Room 353C – Model 1
	Group C2	<i>Ali Naqvi, MD</i> General Session Room 353C – Model 2
	Group C3	<i>Henry Mayo-Malasky, MD</i> General Session Room 353C – Model 3
	Group C4	<i>Max Rosenthal, MD</i> General Session Room 353C – Model 4

	Group C5	<i>Virginia Zarama, MD</i>	<i>General Session Room 353C – Model 5</i>
	Group C6	<i>Wincy Ng, MBBS</i>	<i>General Session Room 353C – Model 6</i>
	Group C7	<i>Michel Boivin, MD, FCCP</i>	<i>General Session Room 353C – Model 7</i>
	Group C8	<i>Harald Sauthoff, MD, FCCP</i>	<i>General Session Room 353C – Model 8</i>
	Group C9	<i>Kevin Proud, MD, FCCP</i>	<i>General Session Room 353C – Model 9</i>
	Note: One Rotation Without Faculty – 35 minutes		
2:40 PM – 2:50 PM	Rotate Rooms		
2:50 PM – 4:00 PM	Image Interpretation Room 1		
	Group C		
	Image Interpretation Room 2		
	Group A		
	Image Acquisition		
	Group B1	<i>Sam Acquah, MBBS, FCCP</i>	<i>General Session Room 353C – Model 1</i>
	Group B2	<i>Ali Naqvi, MD</i>	<i>General Session Room 353C – Model 2</i>
	Group B3	<i>Henry Mayo-Malasky, MD</i>	<i>General Session Room 353C – Model 3</i>
	Group B4	<i>Max Rosenthal, MD</i>	<i>General Session Room 353C – Model 4</i>
	Group B5	<i>Virginia Zarama, MD</i>	<i>General Session Room 353C – Model 5</i>
	Group B6	<i>Wincy Ng, MBBS</i>	<i>General Session Room 353C – Model 6</i>
	Group B7	<i>Michel Boivin, MD, FCCP</i>	<i>General Session Room 353C – Model 7</i>
	Group B8	<i>Harald Sauthoff, MD, FCCP</i>	<i>General Session Room 353C – Model 8</i>
	Group B9	<i>Kevin Proud, MD, FCCP</i>	<i>General Session Room 353C – Model 9</i>
	Note: One Rotation Without Faculty – 35 minutes		
4:00 PM – 4:20 PM	Break and Rotate Rooms		
4:20 PM – 5:30 PM	Image Interpretation Room 1		
	Group B		
	Image Interpretation Room 2		
	Group C		
	Image Acquisition		
	Group A1	<i>Sam Acquah, MBBS, FCCP</i>	<i>General Session Room 353C – Model 1</i>
	Group A2	<i>Ali Naqvi, MD</i>	<i>General Session Room 353C – Model 2</i>
	Group A3	<i>Henry Mayo-Malasky, MD</i>	<i>General Session Room 353C – Model 3</i>
	Group A4	<i>Max Rosenthal, MD</i>	<i>General Session Room 353C – Model 4</i>

	Group A5	<i>Virginia Zarama, MD</i>	<i>General Session Room 353C – Model 5</i>
	Group A6	<i>Wincy Ng, MBBS</i>	<i>General Session Room 353C – Model 6</i>
	Group A7	<i>Michel Boivin, MD, FCCP</i>	<i>General Session Room 353C – Model 7</i>
	Group A8	<i>Harald Sauthoff, MD, FCCP</i>	<i>General Session Room 353C – Model 8</i>
	Group A9	<i>Kevin Proud, MD, FCCP</i>	<i>General Session Room 353C – Model 9</i>
	Note: One Rotation Without Faculty – 35 minutes		

Course Description

This course will provide training in advanced critical care echocardiography (ACCE), including image interpretation, image acquisition, and clinical applications. The learners will engage in small-group, hands-on training alternating with case-based image interpretation. Brief, focused, didactic lectures will be incorporated into the training sequence and include real-time demonstration scanning. This course will be led by faculty who are all certified by the National Board of Echocardiography in ACCE.

This course is intended for the clinician who already has skill at basic critical care echocardiography and who seeks to augment their capability with additional 2D views and Doppler measurements of cardiac function. Clinicians who are in the process of fulfilling requirements for the National Board of Echocardiography certification in critical care echocardiography should consider attending.

Course Objectives

- Understand how to optimize Doppler measurement in reference to gain, scale, angle, and optimal selection of Doppler type.
- Understand how to optimize use of color Doppler while avoiding its failure points.
- Develop capability at interpretation of ACCE studies and their application to clinical management of complex cardiopulmonary failure in the ICU.
- Develop capability at 2D imaging beyond the five views needed for limited echocardiography studies.

Targeted Audience

Pulmonary Physicians, Critical Care Physicians, Cardiologists, Cardiothoracic Surgeons, Intensivists, Family Medicine, General Internal Medicine, Advance Practice Providers, Fellows-in-Training, Physician Assistants/Associates

Participation Feedback

The participation threshold of a score of 70% or more passing standard for this course, includes learner completion of the final self-assessment and learner completion of the CME credit evaluation, including the identification of what changes the learner expects to make in practice due to participation in this course."

Live Learning

The participation threshold of a score of 70% or more passing standard for this course, includes learner completion of the learner completion of the educational activity evaluation, including the identification of what changes the learner expects to make in practice due to participation in this course.

Maintenance of Licensure

Maintenance of Credit (MOC) offered in medical knowledge.



Scope of Practice – Pulmonary Medicine Education
Scope of Practice – Critical Care Education

FACULTY

Co-Chair/Planner

Yonatan Y. Greenstein, MD, FCCP

Associate Professor of Medicine
Department of Medicine
Division of Pulmonary and Critical Care Medicine
Rutgers – New Jersey Medical School
Newark, NJ

Paul H. Mayo, MD, FCCP

Academic Director of Critical Care
Division of Pulmonary, Critical Care & Sleep Medicine
Northwell Health LIJ/NSUH Medical Center
Professor of Clinical Medicine
Donald and Barbara Zucker School of Medicine at Hofstra/Northwell
Hempstead, NY

Faculty/Planners

Sam Acquah, MBBS, FCCP

Director of Medical Critical Care, Mount Sinai Hospital
Section Chief Medical Critical Care, Division of Pulmonary and Critical Care Medicine
Professor of Medicine, Icahn School of Medicine
New York, NY

Michel Boivin, MD, FCCP

Professor of Internal Medicine
Division of Pulmonary, Sleep and Critical Care
University of New Mexico
Albuquerque, NM

Ali Naqvi, MD

Henry Mayo-Malasky, MD
Division of Pulmonary & Critical Care Medicine
NYCHHC Lincoln Medical Center
Bronx, NY

Wincy Ng, MBBS

Associate Consultant at the Adult Intensive Care Unit
Queen Mary Hospital, Hong Kong

Kevin Proud, MD, FCCP

Associate Professor of Medicine
Division of Pulmonary and Critical Care Medicine
UT Health San Antonio



Max Rosenthal, MD

Division of Pulmonary and Critical Care Medicine
Northwell Health – Donald and Barbara Zucker
School of Medicine
New Hyde Park, NY

Harald Sauthoff, MD, FCCP

Adjunct Professor of Medicine
NYU Grossman School of Medicine
Director, MICU
Westchester Medical Center
Valhalla, NY

Virginia Zarama, MD

Associate Professor of Medicine
Academic Professor of Medicine
Fundación Valle del Lili
Universidad ICESI, Cali Columbia

DISCLOSURE OF FINANCIAL RELATIONSHIPS

The mission and vision of CHEST include our commitment to providing accurate, balanced, evidence-based information to health care professionals participating in this educational course. To guarantee our accredited continuing education is fair and balanced and that any clinical content presented supports safe, effective patient care, we require all planners, faculty, and others in control of educational content to complete and submit financial disclosures of all relationships with Accreditation Council for Continuing Medical Education-defined ineligible companies within the prior 24 months. We value the contributions of those who are committed and passionate about pulmonary medicine and want to be a part of our educational courses; however, it is our commitment to our learners to have continuing education free of commercial bias and marketing.

Identified conflicts of interest are reviewed by the educational course director/chair, the Accreditation Team, and/or the Professional Standards Committee to ensure conflicts are properly mitigated. CHEST educational standards pertaining to conflict of interest are intended to ensure the delivery of balanced, evidence-based, scientific presentations. Disclosure of any or no relevant financial relationships will be made available online in course materials and on-site during all educational courses.

The following faculty/planner members of this course have disclosed to CHEST that they have a relevant financial relationship with a commercial interest as it relates to the course:

Name	Role	Disclosure
Virginia Zarama, MD	Faculty	Speaker/Speaker's Bureau relationship with Mindray; 09/23

The remaining faculty/planner members of this course who are not listed in the grid above have indicated to CHEST that they have no relevant financial relationships with any commercial interests.

Education Committee/Planners

Chair

Hans J. Lee, FCCP, MD

Consultant: Veracyte



Vice Chair

Mark Lavercombe, FCCP, MBBS

No relevant financial relationships.

CHEST CME Credit Staff Planners

The following CME Credit Staff Planners have no financial relationships to disclose:

Richard Schuch

Carolyn M. Jones

Aleda Ealom

Clay Hamlet

Joanna Neems, MEd

Alexandra Zurbuchen, MBA

DISCLOSURE OF COMMERCIAL SUPPORT (IF APPLICABLE)

We gratefully acknowledge the following for their financial support of (NAME OF COURSE):

List all financial supporters here.

We gratefully acknowledge the following for their in-kind support of (NAME OF COURSE):

Company	Support (Please describe what each company provided.)

CME/CE CREDIT INFORMATION

CME/CE Credit Claim Instructions

Advanced Robotic and Navigational Bronchoscopy

To complete the Education Course Evaluation for **Advanced Robotic and Navigational Bronchoscopy**, claim CME/CE credits, and download CME/CE certificates and certificates of attendance (COA), please see the instructions below. **You must complete your evaluation and download your certificate prior to the product expiration date.**

1. Sign in and navigate to your “My Learning” account at education.chestnet.org.
2. Find the course or event in your list and complete all required post-course work.
3. Claim credits when prompted.

Your certificate and transcript can be viewed at any time under Claimed Courses on the [Manage CME](#) page.

If you are claiming MOC points, please make sure that your full name, date of birth, and American Board of Internal Medicine (ABIM) number listed in your CHEST account match what is listed in your ABIM account. To prevent delays in receiving MOC points, please check that your ABIM account is current.

If you need help, contact the CHEST Accreditation Team at cme@chestnet.org. For faster assistance, outline the specific problem you are having, and provide your CHEST ID and contact information.

**YOU MUST COMPLETE THE POST-COURSE ASSESSMENT AND EDUCATION COURSE EVALUATION
PRIOR TO THE PRODUCT EXPIRATION DATE APRIL 8, 2025**



Physician Credit

The American College of Chest Physicians is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

The American College of Chest Physicians designates this live activity for a maximum of **8.75 AMA PRA Category 1 Credit™**. Physicians should claim only the credit commensurate with the extent of their participation in the course.

Nursing Credit

The American College of Chest Physicians is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. The American College of Chest Physicians designates this live activity for a maximum of **8.75 AMA PRA Category 1 Credits™**.

One *AMA PRA Category 1 Credit™* is equal to one contact hour for the following professional certification organization:

- American Nurses Association (ANCC)
- American Association of Nurse Practitioners (AANP)

For registered nurses, please check your state licensing board for CME equivalency.

Nurse Practitioners

The American College of Chest Physicians is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. The American College of Chest Physicians designates this live activity for a maximum of **8.75 AMA PRA Category 1 Credits™**.

One *AMA PRA Category 1 Credit™* is equal to one contact hour for the following professional certification organization:

- The American Academy of Nurse Practitioners Certification Board (AANPCB)

Physician Assistants

The American College of Chest Physicians is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. The American College of Chest Physicians designates this live activity for a maximum of **8.75 AMA PRA Category 1 Credits™**.

One *AMA PRA Category 1 Credit™* is equal to one contact hour for the following professional certification organizations:

- American Academy of Physical Assistants (AAPA)
- The National Commission on Certification of Physician Assistants (NCCPA)

COA

The American College of Chest Physicians confirms that the individual named below has participated in this educational activity.

The American College of Chest Physicians designates this live activity for a maximum of **8.75 AMA PRA Category 1 Credits™**. Participants should claim only the credit commensurate with the extent of their participation in the activity.

Maintenance of Certification Statement

Successful completion of this CME credit course enables the participant to earn up to **8.75 MOC Part 2 Medical Knowledge points** in the American Board of Internal Medicine's (ABIM) Maintenance of Certification (MOC) program. Participants will earn MOC points equivalent to the amount of CME credits claimed for the course. It is the CME credit course provider's responsibility to submit participant completion information to ACCME for the purpose of granting ABIM MOC points.



Upon successful completion of this course, CHEST will submit your completion data to ABIM via ACCME's Program and Course Reporting System (PARS) for MOC points. To prevent delay in receiving your ABIM points, please make sure that your ABIM number, birth date, and full name in your CHEST account match your ABIM account. Please also make sure that your ABIM account is current. After claiming CME credits, please allow 3 to 5 business days after claiming for credits to show in your ABIM record.

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American College of Chest Physicians
2595 Patriot Boulevard
Glenview, IL 60026
Telephone: +1 (224) 521-9800; Fax: +1 (224) 521-9801
chestnet.org