## Cover Page

# 2nd Annual Course:
# Heart of the Matter: Case-Based and Hands-On Experience for the Echo Lab Team

CE Accredited Live Activity

## Saturday, September 13, 2025
## 7:45 am - 5:30 pm

### Location

Joyce Voorhees Zimmerli Art Museum | Rutgers
71 Hamilton Street
New Brunswick, NJ 08901

### Jointly Provided by

Rutgers Health
Rutgers Robert Wood Johnson Medical School
Department of Medicine
Division of Cardiovascular Diseases and Hypertension

and

RWJBarnabas Health
Robert Wood Johnson University Hospital
Division of Cardiology

RWJBarnabas HEALTH | Robert Wood Johnson University Hospital

RUTGERS HEALTH Robert Wood Johnson Medical School

## Mail Panel

RUTGERS HEALTH Robert Wood Johnson Medical School
Center for Continuing and Outreach Education
30 Bergen Street • ADMC 7 • Newark, NJ 07107-3000

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CE Accredited Live Activity

**2nd Annual Course: Heart of the Matter: Case-Based and Hands-On Experience for the Echo Lab Team**

Saturday, September 13, 2025 ● 7:45 am - 5:30 pm

To Register: https://rutgers.cloud-cme.com/NJEcho2025

## Overview

Cardiovascular diseases remain the leading cause of morbidity and mortality worldwide. While significant advancements have been made in cardiology, early recognition and accurate assessment of cardiovascular conditions continue to present challenges. Echocardiography plays a critical role in diagnosing and managing a wide spectrum of cardiac disorders, including heart failure, valvular disease, pericardial conditions, and emerging applications in cardio-oncology and artificial intelligence (AI)-assisted imaging.

This symposium is designed to address professional practice gaps by providing a comprehensive, case-based, and hands-on approach to echocardiographic assessment. Through expert-led discussions and interactive workshops, participants will enhance their proficiency in two-dimensional, Doppler, and three-dimensional echocardiography; explore emerging imaging modalities such as left atrial strain and AI-assisted interpretation; and refine their skills in standardized imaging protocols. Special focus areas include the recognition and quantification of heart failure, valvular disease assessment, pericardial pathology, and the role of point-of-care ultrasound (POCUS) in clinical decision-making.

By the end of this symposium, attendees will be better equipped to integrate echocardiographic findings into patient care, improve diagnostic accuracy, and contribute to advancing cardiovascular imaging practices.

## Target Audience

This activity is intended for physicians, sonographers, advanced practice providers, nurses, pharmacists, residents, fellows, paramedics, emergency medical technicians, and other allied healthcare professionals involved in the echocardiographic assessment and management of cardiovascular disease. Specialties that may benefit from this program include cardiology, internal medicine, anesthesiology, critical care, emergency medicine, neurology, and hospital medicine.

## Learning Objectives

Upon completion of this activity, participants should be better able to:

- Apply the latest evidence-based approaches to diagnose and manage heart failure using echocardiography.
- Accurately quantify valvular heart disease severity and integrate findings into treatment decisions.
- Identify and evaluate pericardial diseases using echocardiographic techniques.
- Utilize emerging imaging modalities, including strain imaging, 3D echocardiography, and AI-driven applications.
- Implement guideline-based algorithms for cardiovascular disease assessment and management.
- Recognize the role of point-of-care ultrasound (POCUS) in acute and critical care settings.
- Develop proficiency in 3D echocardiography, strain imaging and analysis techniques.
- Review quality assurance principles in echocardiographic imaging, including safety, reproducibility, and equipment maintenance.
- Describe the integral role of nursing professionals in the transesophageal echocardiography (TEE) lab to enhance procedural efficiency and safety.
- Explain the hemodynamic principles of shock and demonstrate echocardiographic strategies for assessing patients supported with mechanical circulatory devices.

## Accreditation


In support of improving patient care, this activity has been planned and implemented by Rutgers Biomedical and Health Sciences and Robert Wood Johnson University Hospital. Rutgers Biomedical and Health Sciences is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

**Physicians:** Rutgers Biomedical and Health Sciences designates this live activity for a maximum of 7.5 *AMA PRA Category 1 Credits*™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

**Nurses:** This activity is awarded 7.5 ANCC contact hours. Nurses should only claim those contact hours actually spent participating in the activity.

**Physician Associates:** NCCPA accepts certificates of participation for educational activities approved for *AMA PRA Category 1 Credit*™ from organizations accredited by ACCME.

**Sonographers:** An application has been submitted to Society of Diagnostic Medical Sonography (SDMS) for approval.

## Method of Participation

In order to meet the learning objectives and receive continuing education credits, participants are expected to register for the activity, check in at the registration desk, attend the program and complete an online evaluation at the conclusion of the activity. A CE certificate will be emailed to participants upon completion of the online evaluation.

## Rutgers Health/RWJBarnabas Health Faculty

### Activity Director

**Kameswari Maganti, MD, FASE,** Professor of Medicine, Section Chief, Non-Invasive Cardiology, Rutgers Robert Wood Johnson Medical School; Director of Echocardiography Lab, Cardiodynamics and Vascular Laboratory, Robert Wood Johnson University Hospital

### Activity Co-Directors

**Alicia Wright, RCS, FASE,** Supervisor of Echocardiography, Cardiodynamics Laboratory, Robert Wood Johnson University Hospital

**Grace Casaclang-Verzosa, MD, MBA,** Administrative Director, Noninvasive Cardiology, Robert Wood Johnson University Hospital

### Activity Coordinator

**Choula Panchal**, Supervisor, EKG/Stress, Robert Wood Johnson University Hospital

### Faculty

**Justin W. Ady, MD, RPVI,** Assistant Professor of Surgery, Medical Director, Non-Invasive Vascular Laboratory, Rutgers Robert Wood Johnson Medical School

**Chonyang L. Albert, MD**, Assistant Professor of Medicine, Rutgers Robert Wood Johnson Medical School; Medical Director, Left Ventricular Assist Devices and Mechanical Circulatory Support, Robert Wood Johnson University Hospital

**Ashok Chaudhary, MD,** Associate Professor of Medicine, Program Director, Interventional Cardiology Fellowship, Robert Wood Johnson Medical School

**Sasha-Ann East, MD,** Assistant Professor of Medicine, Rutgers Robert Wood Johnson Medical School

**Yasmin Hamirani, MD,** Associate Professor of Medicine, Rutgers Robert Wood Johnson Medical School; Director of Structural Heart Imaging and Innovations, Robert Wood Johnson University Hospital

**Sheila Hernandez, RN, BSN, PCCN,** Cardiac Nurse, Robert Wood Johnson University Hospital

**Andreana Jones, RCS,** Cardiac Sonographer, Robert Wood Johnson University Hospital

**Audrey McIntyre, RN, BSN,** Clinical Coordinator, Robert Wood Johnson University Hospital

**Lydia McMurray, RDCS**, Cardiac Sonographer, Robert Wood Johnson University Hospital

**Sharada Muralidhar, RVT,** Vascular Lab Supervisor, Robert Wood Johnson University Hospital

**Ekta Patel, MS, RDCS, RVT,** Cardiac Sonographer, Monmouth Medical Center

**Julio Perez-Mego, RCS**, **RCCS, RVT, FASE,** Cardiac Sonographer, Rutgers Robert Wood Johnson Medical School

**Kayla Senape, RCS,** Cardiac Sonographer, Robert Wood Johnson University Hospital

**Partho Sengupta, MD, FASE,** Henry Rutgers Professor of Cardiology, Chief, Division of Cardiovascular Diseases and Hypertension, Rutgers Robert Wood Johnson Medical School; Chief of Cardiac Services, Robert Wood Johnson University Hospital

**Daniel Shindler, MD,** Professor of Medicine, Rutgers Robert Wood Johnson Medical School

**Nidhi Tripathi, MD,** Assistant Professor of Medicine, Director, Cardio-Oncology, Rutgers Robert Wood Johnson Medical School

**Esad Vucic, MD, PhD**, Director, Cardiac Imaging, Newark Beth Israel Medical Center; Clinical Assistant Professor of Medicine, Rutgers New Jersey Medical School

**Yanting Wang, MD,** Assistant Professor of Medicine, Director, Cardio-Obstetrics, Rutgers Robert Wood Johnson Medical School

The relevant financial relationships of all individuals who affect the content of continuing education activities and any discussion of off-label/investigational uses will be disclosed to the audience at the time of the activity.

## Agenda

| | |
|---|---|
| 7:45 am | *Registration/Continental Breakfast/Exhibits* |
| 8:15 am | **Welcome Address** ..... Partho Sengupta, MD |
| | **Session 1: Systolic Function Assessment: Focus on 3D and Strain**<br>Moderators: Kameswari Maganti, MD |
| 8:30 am | **Systolic Function Assessment**..... Kameswari Maganti, MD |
| 8:45 am | **Case 1 - Heart Failure with Preserved Ejection Fraction (HFpEF)** .....Ekta Patel, MS, RDCS, RVT |
| 9:00 am | **Case 2 – Imaging in Cardio-Oncology: Heart Failure with Reduced Ejection Fraction (HFrEF)** .....Nidhi Tripathi, MD |
| 9:15 am | **Case 3 - Don't Forget the RV/RV Dysfunction** ..... Kayla Senape, RCS |
| 9:30 am | **Case 4 – Assessment of Wall Motion**.....Andreana Jones, RCS |
| 9:45 am | **Panel Discussion; Audience Q&A** |
| 10:00 am | *Refreshment Break/Exhibits* |
| | **Session 2: Diastolic Function: Focus on LA Strain**<br>Moderators: Partho Sengupta, MD and Sasha-Ann East, MD |
| 10:15 am | **Diastolic Function Assessment**.....Partho Sengupta, MD |
| 10:30 am | **Case 1 - Cardiac Amyloidosis**..... Esad Vucic, MD, PhD |
| 10:42 am | **Case 2 - HCM** .....Julio Perez-Mego, RCS, RCCS, RVT |
| 10:54 am | **Panel Discussion; Audience Q&A** |
| | **Session 3: Pericardial Diseases**<br>Moderators: Daniel Shindler, MD and Yanting Wang, MD |
| 11:15 am | **Assessment of Pericardial Diseases** ..... Daniel Shindler, MD |
| 11:30 am | **Case 1 - Cardiac Tamponade** .....Lydia McMurray, RDCS |
| 11:40 am | **Case 2 - Constrictive Pericarditis**..... Yanting Wang, MD |
| 11:50 am | **Case 3 - Restrictive Cardiomyopathy** .....Nidhi Tripathi, MD |
| 12:00 pm | **Panel Discussion; Audience Q&A** |
| | **Session 4: Carotid Artery Disease and Nursing/TEE Lab**<br>Moderators: Yasmin Hamirani, MD and Kameswari Maganti, MD |
| 12:15 pm | **What is Carotid Ultrasound? What Are the Indications?**..... Justin W. Ady, MD |
| 12:30 pm | **How Do You Perform a Carotid Duplex Study?** ..... Sharada Muralidhar, RVT |
| 12:45 pm | *Lunch/Exhibits* |
| 1:30 pm | **What is the Role of Nursing Staff in the TEE Lab?**<br>..... Audrey McIntyre, RN, BSN and Sheila Hernandez, RN, BSN, PCCN |

## Session 5: Mitral Valve Disease

Moderators: Ashok Chaudhary, MD, Yasmin Hamirani, MD and Kameswari Maganti, MD

2:00 pm **Overview of Mitral Valve Disease** ..... Yasmin Hamirani, MD

2:15 pm **Case 1 - Mitral Stenosis** ..... Kameswari Maganti, MD

2:25 pm **Case 2 - Mitral Regurgitation** ..... Kameswari Maganti, MD

2:35 pm **Case 3 – Ice Imaging for LAA Occlusion** ..... Ashok Chaudhary, MD

2:50 pm **Primary versus Secondary MR: How Do We Assess and Manage?** .... Sasha-Ann East, MD

3:05 pm **Panel Discussion; Audience Q&A**

3:15 pm *Refreshment Break/Exhibits*

## Session 6: "How-To"

Moderators: Chonyang L. Albert, MD, Sasha-Ann East, MD and Yasmin Hamirani, MD

3:30 pm **Introduction to Mechanical Circulatory Support** ..... Chonyang L. Albert, MD

3:45 pm **How Do You Interrogate the Following Devices: Impella, LVAD and ECMO** ..... Alicia Wright, RCS

4:15 pm *Break*

## Session 7: Hands-On

Moderators: Chonyang L. Albert, MD and Yasmin Hamirani, MD

4:30 pm

| Room A | Room B |
|---|---|
| **Introduction to Strain** | **Introduction to 3D** |
| Lydia McMurray, RDCS | Sasha-Ann East, MD |
| Nidhi Tripathi, MD | Andreana Jones, RCS |
| | Alicia Wright, RCS |

5:30 pm *Adjourn*

# General Information

| Registration Fees | |
|---|---|
| Physician | $75 |
| Other Healthcare Professional | $60 |
| Rutgers Health/RWJBarnabas Health Faculty/Staff | $45 |
| Resident/Fellow/Healthcare Student (with letter)* | Complimentary |

**Registration must be accompanied by program director's letter confirming resident/fellow/student status. Please upload your letter when registering or email to ccoe@rbhs.rutgers.edu.*

Registration fee includes continental breakfast, refreshment breaks, lunch, continuing education credits and course material. Registration can only be accepted through our secure online website through September 10, 2025. Registration will not be confirmed until payment is received. If payment is not received in time for the activity, Rutgers reserves the right to cancel the registration.

## Pre-registration is recommended. On-site registration will be accommodated on a space available basis.

## To Register: https://rutgers.cloud-cme.com/NJEcho2025

## Course Material

In an effort to provide the most complete materials to attendees and conserve resources, PDF versions of the lecture slides will be made available online to registered attendees. Additional information will be provided in future confirmation communications.

## Confirmation

Once registered, you will receive an email confirmation. As the activity date approaches, you will receive additional information to assist you with your plans to participate in this activity.

## Location

Joyce Voorhees Zimmerli Art Museum | Rutgers
71 Hamilton Street
New Brunswick, NJ 08901

Complimentary parking will be available in various Rutgers' lots around the museum. . Participants will receive additional information in their confirmation materials.

## Cancellation Fee/Refund

A full refund, less a $25 cancellation fee, will be granted if notice is received no later than September 12, 2025. Refunds will not be issued for any cancellations received after September 12, 2025 and cannot be given for no shows. To cancel, please contact Rutgers Center for Continuing and Outreach Education by email at ccoe@rbhs.rutgers.edu.

## For Additional Information

For additional information, questions, concerns, or if you require special arrangements to attend this activity, please contact Rutgers Center for Continuing and Outreach Education by email at ccoe@rbhs.rutgers.edu.

Rutgers Health and Robert Wood Johnson University Hospital reserve the right to modify program content, faculty and program activities and reserve the right to cancel the activity, if necessary. If the activity is cancelled, liability is limited to the registration fee.

Activity Code: 26MR02