

SEPTEMBER 25 - 26, 2026

#MCSPERFCON

4TH ANNUAL
MCSPERFCON
MECHANICAL CIRCULATORY
SUPPORT & PERFUSION
SYMPOSIUM

**Cutting-Edge Critical Care, Hands-On
Echocardiography, ECMO, & MCS Workshops**

TMC3 Collaborative Building
7255 Helix Park Avenue
Houston, Texas



PRESENTED BY

 **Baylor St. Luke's
Medical Center**

 **Baylor
College of
Medicine**

 **THE TEXAS HEART INSTITUTE**

Baylor College of Medicine is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians. This activity is approved for AMA PRA Category 1 Credits™.

PROVIDED BY

 **Baylor
College of
Medicine**

A N O T E F R O M M C S P E R F C O N

*Lots of learning.
Lots of merging.
Lots of time.*

*The purpose is to bring education to this advanced field —
the know-how, for those who don't know but want to know.*

*The industry that surrounds us is strong,
but those around it don't know how —*

YET.

That's why we are here.

We are the marquee.

MCSperfCON — *for the people.*

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A W E L C O M E

Welcome to our spaceship — the TMC3 Collaborative Building.

*It represents what MCSperfCON is: an open spaceship.
Pictures will not do it justice. You have to see it to believe it.*

An educational journey

F O R *intensivists, perfusionists, surgeons, nurses,
advanced practice providers, fellows, residents & medical students;*

F O R *those in the community who want to bring
this technology to their space;*

& F O R *all who are inspired by the world of
mechanical circulatory support, ECMO & echocardiography.*

P R E S E N T E D B Y



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THE TEXAS HEART INSTITUTE

DAY ONE · FRIDAY, SEPTEMBER 25, 2026

The Didactic Program

Main Hall · TMC3 Collaborative Building · Houston, Texas

VISIT OUR VENDORS

Vendors are stationed across the 1st, 2nd, 3rd & 4th floors of the TMC3 Collaborative Building. Use your break times to explore and connect with the wonderful vendors and sponsors who make this entire event a reality.

OPENING

Welcome & Opening Remarks

7:50 - 8:00 AM Welcome & Opening Remarks

SESSION 01

Understanding Shock Physiology — A Common Language for Intensivists & Perfusionists

8:00 - 8:10 AM What Is Shock and Perfusion?

8:10 - 8:20 AM Cardiogenic Shock Phenotyping

8:20 - 8:30 AM Understanding Venous Return: Rational Use of Fluids

8:30 - 8:40 AM Establishing a Shock Team

8:40 - 9:00 AM *Panel Discussion*

SESSION 02

From Fluids to Pressors — Resuscitation Before MCS

9:00 - 9:10 AM Invasive Hemodynamic Monitoring

9:10 - 9:20 AM Non-Invasive Hemodynamic Monitoring

9:20 - 9:30 AM Fundamentals of Inotropes

9:30 - 9:40 AM Rational Use of Vasopressors in Vasodilatory Shock

9:40 - 10:00 AM *Panel Discussion*

10:00 - 10:30 AM BREAK · VENDOR INTERACTIONS + REFRESHMENTS

SESSION 03

IABP in the Modern Shock Algorithm — Bridge, Bailout, or Both?

10:30 - 10:40 AM	IABP Revisited: Old, Relevant & Often Misunderstood — IABP Physiology & Waveforms
10:40 - 10:50 AM	IABP at the Bedside: Troubleshooting for Nurses and Perfusionists
10:50 - 11:00 AM	Axillary Balloon Pump
11:00 - 11:10 AM	What's the Best Way to Wean the IABP?
11:10 - 11:30 AM	<i>Panel Discussion</i>
11:30 AM - 12:30 PM	KEYNOTE LUNCH • JOURNEY OF THE TOTAL ARTIFICIAL HEART

SESSION 04

The Impella

12:45 - 12:55 PM	Pressure-Volume Loops and LV Unloading
12:55 - 1:05 PM	Impella Insertion and Management Pearls
1:05 - 1:15 PM	VA ECMO + Impella
1:15 - 1:25 PM	Protected Cardiac Surgery with Impella
1:25 - 1:45 PM	<i>Panel Discussion</i>

SESSION 05

MCS for RV Failure

1:45 - 1:55 PM	Right-Sided MCS: Centrifugal Flow Pumps (Protek Duo, TandemHeart, CentriMag)
1:55 - 2:05 PM	Right-Sided MCS: Axial Flow Pumps (Impella RP)
2:05 - 2:15 PM	Letting Go of the Right Side: When and How to Wean the RVAD
2:15 - 2:25 PM	One Pump Isn't Enough: When to Escalate to BiVAD
2:25 - 2:45 PM	<i>Panel — Real-World Resuscitation Decisions Before MCS: Applying Physiology Under Pressure</i>
2:45 - 3:15 PM	BREAK • VENDOR INTERACTIONS + REFRESHMENTS

SESSION 06

VAD Physiology for Non-VAD Providers

3:15 - 3:25 PM	Concepts of VAD Physiology: What Everyone Must Know
3:25 - 3:35 PM	Optimizing LVAD Hemodynamics in the ICU
3:35 - 3:45 PM	VAD Complications & Troubleshooting: Recognition and Management
3:45 - 3:55 PM	How to Reduce Stroke Over the Lifetime of an LVAD Patient
3:55 - 4:05 PM	<i>Panel — Optimization of LVAD</i>

SESSION 07

Biventricular Failure

4:05 - 4:15 PM	Percutaneous Biventricular Support vs ECMO for BiV Failure
4:15 - 4:25 PM	Surgical Approach to Biventricular Failure
4:25 - 4:35 PM	Pneumatic vs Continuous Flow Total Artificial Heart: Surgeon Perspective
4:35 - 4:45 PM	Pneumatic vs Continuous Flow Total Artificial Heart: Intensivist Perspective
4:45 - 5:05 PM	<i>Panel — BiVAD vs. TAH: Decision-Making in End-Stage Biventricular Failure</i>

CLOSING

End of Day One

5:05 - 5:10 PM	Closing Remarks
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DAY TWO · SATURDAY, SEPTEMBER 26, 2026

Three Parallel Tracks

TMC3 Collaborative Building · Houston, Texas

I

TRACK

ECMO & Perfusion

HELIX Hall

8:00 AM – 4:50 PM

II

TRACK

Echo Workshop

Hermann + Levy Halls

8:00 AM – 5:40 PM

III

TRACK

MCS Hands-On

4th Floor · Braeswood Room

12:30 – 5:00 PM

HOW TO CHOOSE A TRACK

If you're a Track 1 attendee

Complete the ECMO morning sessions and hands-on workshops, then move to Track 3 (MCS Hands-On Workshop) in the afternoon.

If you're a perfusion student or perfusion attendee

Continue in Track 1 for the afternoon advanced perfusion talks and class presentations.

If you're a Track 2 attendee

Track 2 is a dedicated all-day Echo Workshop. Track 2 attendees do not have access to the other tracks.

VISIT OUR VENDORS

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TRACK I · SATURDAY, SEPTEMBER 26

ECMO & Perfusion

HELIX Hall · TMC3 Collaborative Building

7:30 – 7:50 AM REGISTRATION

SESSION 08

VV ECMO

8:00 – 8:10 AM Who, When, and Why: VV ECMO Patient Selection in 2026

8:10 – 8:20 AM Bridge to Transplant, Recovery & No-Man's Land

8:20 – 8:30 AM Cannulation Strategies

8:30 – 8:40 AM Weaning VV ECMO: Extubate or Decannulate?

8:40 – 9:00 AM *Panel Discussion*

9:00 – 9:10 AM BREAK · ORGANIZE GROUPS FOR VV ECMO HANDS-ON

SESSION 09

VV ECMO Hands-On Workshop · Facilitator-Led Stations

9:10 – 9:30 AM **Station 1** ECMO Circuit Review: Tip to Tip

9:30 – 9:35 AM BREAK

9:35 – 9:55 AM **Station 2** Cannulations, Complications & Limb Ischemia

9:55 – 10:00 AM BREAK

10:00 – 10:20 AM **Station 3** Monitoring Your ECMO Circuit

SESSION 10

VA ECMO

10:20 – 10:30 AM VA ECMO for Shock and Arrest: Selecting the Right Patients, Fast

10:30 – 10:40 AM Cannulation Strategies, Flows, Afterload & the LV: Managing the Hemodynamics of VA ECMO

10:40 – 10:50 AM Anticoagulation and Complications in VA ECMO: What Keeps You Awake at Night

10:50 – 11:00 AM	Weaning VA ECMO
11:00 – 11:40 AM	<i>Panel Discussion</i>
11:40 AM – 12:10 PM	LUNCH
12:10 – 12:20 PM	BREAK · ORGANIZE GROUPS FOR VA ECMO HANDS-ON

SESSION 11

VA ECMO Hands-On Workshop · Facilitator-Led Stations

12:20 – 12:40 PM	Station 1 Loss of Flow
12:40 – 12:45 PM	BREAK
12:45 – 1:05 PM	Station 2 Loss of Pulsatility
1:05 – 1:10 PM	BREAK
1:10 – 1:30 PM	Station 3 North-South & East-West
1:40 – 2:00 PM	BREAK · VENDOR INTERACTIONS + REFRESHMENTS

SESSION 12

Advanced Perfusion Talks

2:00 – 2:10 PM	From High Volume to ELSO Center of Excellence
2:10 – 2:20 PM	ECMO with Limited Resources
2:20 – 2:30 PM	Debate — DCD Transplant & NRP: Proposition
2:30 – 2:40 PM	Debate — DCD Transplant & NRP: Opposition
2:40 – 2:50 PM	Establishing an ECMO Program in the Community
2:50 – 3:00 PM	BREAK · VENDOR INTERACTIONS + REFRESHMENTS

SESSION 13

December 2026 Class Presentations

3:00 – 3:10 PM	Blood Conservation and CPB
3:10 – 3:20 PM	Hemoconcentrator vs. Spontaneous Diuresis in Patients with Preserved Renal Function
3:20 – 3:30 PM	Hyperoxia During CPB: How Much Is Too Much?

3:30 - 3:40 PM	Portable ECMO for Pre-Hospital Cardiac Arrest: Field to OR
3:40 - 3:50 PM	East-West Syndrome
3:50 - 4:00 PM	Hemoconcentration Effect on Complement Levels Pre and Post Cross-Clamp
4:00 - 4:10 PM	Trans-Cervical Robotic Aortic Valve Replacement
4:10 - 4:20 PM	DO ₂ i and TUC Effects on AKI
4:20 - 4:50 PM	<i>Questions / Overtime</i>

TRACK II · SATURDAY, SEPTEMBER 26

Echo Workshop

Hermann Hall + Levy Hall · 2nd Floor, TMC3 Collaborative

FORMAT

Groups A and B rotate between Hermann Hall (didactics) and Levy Hall (hands-on skill stations). All-day program — Track 2 attendees do not access other tracks.

BLOCK 01 · 8:00 - 10:00 AM

Foundations of Critical Care Echo

8:00 - 8:20 AM	Lecture (Hermann Hall) — Critical Care Echocardiography as an Extension of the Physical Exam: Heart, Lungs & Abdomen
8:20 - 9:10 AM	Rotation 1 (Levy Hall) — Lung Ultrasound · FAST Exam · Apical, Subcostal & Parasternal Windows
9:10 - 10:00 AM	Rotation 2 (Levy Hall) — Same stations, groups swap
10:00 - 10:15 AM	BREAK

BLOCK 02 · 10:15 AM - 12:15 PM

Critical Care Echo in Undifferentiated Shock

10:15 - 10:35 AM	Lecture (Hermann Hall) — Critical Care Echocardiography in Undifferentiated Shock
10:35 - 11:25 AM	Rotation 1 (Levy Hall) — LV Function · RV Function · Tamponade Assessment
11:25 AM - 12:15 PM	Rotation 2 (Levy Hall) — Same stations, groups swap
12:15 - 1:15 PM	LUNCH + VENDOR WALK

BLOCK 03 · 1:15 - 3:15 PM

Hemodynamic Assessment — Fluid Responsiveness vs. Venous Congestion

1:15 - 1:35 PM	Lecture (Hermann Hall) — Hemodynamic Assessment with Critical Care Echo: Fluid Responsiveness vs. Venous Congestion
1:35 - 2:25 PM	Rotation 1 (Levy Hall) — Fluid Responsiveness Assessment · Cardiac Output Measurement · VExUS Protocol

2:25 - 3:15 PM **Rotation 2** (Levy Hall) — Same stations, groups swap

3:15 - 3:30 PM BREAK

B L O C K 0 4 · 3 : 3 0 - 5 : 3 0 P M

MCS Management & Rescue TEE

3:30 - 3:40 PM **Lecture A** (Hermann Hall) — The Role of Echocardiography in MCS Management

3:40 - 3:50 PM **Lecture B** (Hermann Hall) — When Every Beat Counts: Rescue TEE in the Critically Ill Patient

3:50 - 4:40 PM **Rotation 1** (Levy Hall) — Rescue TEE Scanning · Impella Position Under Echo Guidance

4:40 - 5:30 PM **Rotation 2** (Levy Hall) — Same stations, groups swap

C L O S I N G

Final Comments & Wrap-Up

5:30 - 5:40 PM **Final Comments & Wrap-Up**

TRACK III • SATURDAY AFTERNOON

MCS Hands-On Workshop

September 26, 2026 · 4th Floor, Braeswood Room · TMC3 Collaborative

FORMAT

Eight rotation-based hands-on stations with circular flow. Attendees split among stations. Each station is 20 minutes followed by a 5-minute transition.

STATIONS 01-08 • 12:30 - 5:00 PM

Eight Primary Hands-On Stations

12:30 - 12:50 PM	Station 01 Intra-Aortic Balloon Pump Workstation I
12:50 - 12:55 PM	BREAK
12:55 - 1:15 PM	Station 02 Intra-Aortic Balloon Pump Workstation II
1:15 - 1:20 PM	BREAK
1:20 - 1:40 PM	Station 03 Percutaneous Transaortic Micro-Axial Flow Pump I
1:40 - 1:55 PM	EXTENDED BREAK
1:55 - 2:15 PM	Station 04 Percutaneous Transaortic Micro-Axial Flow Pump II
2:15 - 2:20 PM	BREAK
2:20 - 2:40 PM	Station 05 Right Ventricular Assist Device (RVAD)
2:40 - 2:45 PM	BREAK
2:45 - 3:05 PM	Station 06 Left Ventricular Assist Device (LVAD)
3:05 - 3:10 PM	BREAK
3:10 - 3:30 PM	Station 07 Total Artificial Heart / BiVACOR
3:30 - 3:35 PM	BREAK
3:35 - 3:55 PM	Station 08 Mega MCS Interactive Session — Poly-Device Management
3:55 - 4:00 PM	BREAK

CLOSING

4:00 - 5:00 PM **Open Forum + Vendor Exploration**

All Levels of TMC3 Collaborative Building