

DAY 1

SINGLE TRACK, ALL ATTENDEES • 7:50 AM WELCOME & OPENING REMARKS

Lectures & panelsHands-on & simulationBreaks & meals

Day 1 — Morning (7:50 AM – 12:00 PM)

TMC3 Helix Park, Houston TX • Single track, all attendees

7:50–8:00 AMWelcome & Opening Remarks

8:00–8:30 AMJourney of the Total Artificial Heart
Billy Cohn

8:30–9:00 AMKeynote
Jakub Tolar

Session 1 — Understanding Shock Physiology: A Common Language for Intensivists & Perfusionists

9:00–9:10What Is Shock and Perfusion?
Miriam Freundt

9:10–9:20Cardiogenic Shock Phenotyping
Jacob Jentzer

9:20–9:30Understanding Venous Return: Rational Use of Fluids
Mourad Senussi

9:30–9:40Establishing a Shock Team

9:40–10:00Panel Discussion
Subhasis Chatterjee & Jennifer Bruno (Moderator)

Session 2 — From Fluids to Pressors: Resuscitation Before MCS

10:00–10:10Invasive Hemodynamic Monitoring
Mourad Senussi

10:10–10:20Non-Invasive Hemodynamic Monitoring
Orlando Suero

10:20–10:30Fundamentals of Inotropes
Jacob Jentzer

10:30–10:40Rational Use of Vasopressors in Vasodilatory Shock
Subhasis Chatterjee

10:40–11:00Panel Discussion
Kartik Valluri & Toni Duculan (Moderator)

11:00–11:15Break — Vendor Interactions + Refreshments

11:15–12:00Lunch

Session 3 — IABP in the Modern Shock Algorithm: Bridge, Bailout, or Both?

12:00–12:10IABP Revisited: Old, Relevant, and Often Misunderstood — IABP Physiology & Waveforms
Samar Sheth

12:10–12:20IABP at the Bedside: Troubleshooting for Nurses and Perfusionists
Eric Guevara / Circ Support

12:20–12:30Axillary Balloon Pump
Barry Trachtenberg

12:30–12:40What's the Best Way to Wean the IABP?
Mohammad Merchant

12:40–1:00Panel Discussion
Nikolaus Diakos, Analisia Stewart

Session 4 — The Impella

Day 1 — Afternoon (12:00 PM – 5:10 PM)

TMC3 Helix Park, Houston TX • Continued from morning

1:00–1:10Pressure Volume Loops and LV Unloading
Ajith Nair

1:10–1:20Impella Insertion and Management Pearls
Joggy George

1:20–1:30VA ECMO + Impella
Subhasis Chatterjee

1:30–1:40Protective Cardiac Surgery with Impella
Ismail Salas

1:40–2:00Panel Discussion
Prasad Manian, JoAnn Lewis

Session 5 — MCS for RV Failure

2:00–2:10Right-Sided MCS: Centrifugal Flow Pumps (Protek Duo, TandemHeart, CentriMag)
Manish Patel

2:10–2:20Right-Sided MCS: Axial Flow Pumps (Impella RP)
Salman Bandedali

2:20–2:30Letting Go of the Right Side: When and How to Wean the RVAD
Adeel Ahsan

2:30–2:40One Pump Isn't Enough: When to Escalate to BiVAD
Joseph Rogers

2:40–3:00Panel Discussion: Real-World Resuscitation Decisions Before MCS — Applying Physiology Under Pressure
John Park, Mourad Senussi

3:00–3:15Break — Vendor Interactions + Refreshments

Session 6 — VAD Physiology for Non-VAD Providers

3:15–3:25Concepts of VAD Physiology: What Everyone Must Know
Lola Xie

3:25–3:35Optimizing LVAD Hemodynamics in the ICU
Cesar Castillo

3:35–3:45VAD Complications & Troubleshooting: Recognition and Management
Harish Devineni

3:45–3:55How to Reduce Stroke Over the Lifetime of an LVAD Patient
Adeel Ahsan

3:55–4:05Panel Discussion: Optimization of LVAD

Session 7 — Biventricular Failure

4:05–4:15Percutaneous Biventricular Support vs ECMO for BiV Failure
Marwan Jumean

4:15–4:25Surgical Approach to Biventricular Failure
Juan Marciano

4:25–4:35Pneumatic vs Continuous Flow Total Artificial Heart: Surgeon Perspective

4:35–4:45Pneumatic vs Continuous Flow Total Artificial Heart: Intensivist Perspective
Orlando Suero

4:45–5:05Panel: BiVAD vs TAH — Decision-Making in End-Stage Biventricular Failure
Subhasis Chatterjee & Thomas Powell

5:05–5:10Closing Remarks — End of Day 1

DAY 2

REGISTRATION 7:30 – 7:50 AM · THE DAY SPLITS INTO THREE CONCURRENT TRACKS

■ Lectures & panels ■ Hands-on & simulation ■ Breaks & meals

Track A — Main Hall

Helix Hall · ECMO & Advanced Perfusion · 8:00 AM – 4:50 PM

7:30–7:50 AM	Registration
Session 8 — ECMO	
8:00–8:10	Who, When, and Why: VV ECMO Patient Selection in 2026 <i>Analisia Stewart</i>
8:10–8:20	Bridge to Transplant, Recovery & No-Man’s Land <i>Nirmal Sharma</i>
8:20–8:30	Cannulation Strategies <i>Ramiro Fernandez</i>
8:30–8:40	Weaning VV ECMO: Extubate or Decannulate? <i>Kartik Valluri</i>
8:40–9:00	Panel Discussion <i>Adeola Omojola / Brittany Duong</i>
9:00–9:10	Break — group assignments for VV ECMO hands-on
Session 9 — ECMO Hands-On Workshop	
9:10–10:10	ECMO Circuit Review: Tip to Tip [Hands-on] <i>Faculty: Nikolaus Diakos, Sam Sheth, Matthew Nardi</i>
	■ Cannulations [Hands-on] <i>Faculty: Brent Gudenkauf, Michael Harms, Basil Akbik, Louis Anzalone</i>
	■ Monitoring Your ECMO Circuit [Hands-on] <i>Faculty: Cesar Castillo, Megan Palmer, Mohammed Merchant</i>
10:10–10:20	Break — Vendor Interactions + Refreshments
Session 10 — ECMO	
10:20–10:30	VA ECMO for Shock and Arrest: Selecting the Right Patients, Fast <i>Mourad Senussi</i>
10:30–10:50	Open — to be confirmed
10:50–11:00	Cannulation Strategies, Flows, Afterload & the LV: Managing the Hemodynamics of VA ECMO <i>Samar Sheth</i>
11:00–11:10	Anticoagulation and Complications in VA ECMO: What Keeps You Awake at Night <i>Arthur Bracey</i>
11:10–11:20	Weaning VA ECMO <i>Cesar Castillo</i>
11:20–11:40	Panel Discussion <i>Toni Duculan / Ed Yang</i>
11:40–12:10	Lunch
12:10–12:20	Break — group assignments for ECMO hands-on
Session 11 — ECMO Hands-On Workshop	
	Workshop Facilitators: Deborah Adams, Basil Akbik, Louis Anzalone, Cesar Castillo, Miguel Curo, Nikolaus Diakos, Joshua Dollahite, Miriam Freundt, Sofia Garza, Brent Gudenkauf, Michael Harms, Adam Harshman, Kathy Kibler, Ross Leth, Davis Lewis, Quinlan McCollow, Mohammed Merchant, Matthew Nardi, Mourad Senussi, Sam Sheth, Kartik Valluri, Phuong Vo, Ernest Yu
12:20–1:20	Loss of Flow & Pulsatility [Hands-on] <i>Faculty: Nikolaus Diakos, Sam Sheth, Matthew Nardi</i>
	■ Cannulation [Hands-on] <i>Faculty: Brent Gudenkauf, Michael Harms, Basil Akbik, Louis Anzalone</i>
	■ North-South & East-West [Hands-on] <i>Faculty: Kartik Valluri, Mohammed Merchant, Miriam Freundt</i>
1:20–2:00	Open — to be confirmed
Session 12 — Advanced Perfusion Talks	
2:00–2:10	From High Volume to ELSO Center of Excellence <i>Subhasis Chatterjee</i>
2:10–2:20	ECMO with Limited Resources — International Perspective <i>Stepan Maruniak</i>
2:20–2:30	Debate: DCD Transplant & NRP — Proposition (Pro) <i>Murphy Rayle / Scott Noesges</i>
2:30–2:40	Debate: DCD Transplant & NRP — Opposition (Con) <i>Adam Harshman</i>
2:40–2:50	Establishing an ECMO Program in the Community <i>Vivekkumar B. Patel</i>
2:50–3:00	Break — Vendor Interactions + Refreshments
Session 13 — December 2026 Class Presentations	
3:00–3:10	Blood Conservation and CPB <i>Jackson Burkett</i>
3:10–3:20	Hemoconcentrator vs Spontaneous Diuresis in Patients with Preserved Renal Function <i>Auden Chang Houseworth</i>
3:20–3:30	Open — to be confirmed
3:30–3:40	Hyperoxia During CPB: How Much Is Too Much? <i>Joshua Grover</i>
3:40–3:50	Portable ECMO for Pre-Hospital Cardiac Arrest: Field to OR <i>Natalie Johnson</i>
3:50–4:00	East-West Syndrome <i>Beth Johnston</i>
4:00–4:10	Hemoconcentration Effect on Complement Levels Pre- and Post-Cross-Clamp <i>Ashley Sumpter</i>
4:10–4:20	Trans-Cervical Robotic Aortic Valve Replacement <i>Dru Wallis</i>
4:20–4:30	DO2i and TUC Effects on AKI <i>Morgan Weiss</i>
4:30–4:50	Questions / Overtime

Track B — Echo Track

Herman Hall Auditorium; Levy & Herman Conf. Rooms · 8:00 AM – 5:40 PM

Block 1 — Foundations of Critical Care Echo [8:00–10:00 AM]	
8:00–8:20	Critical Care Echocardiography as an Extension of the Physical Exam: Heart, Lungs, and Abdomen <i>Nick Villalobos</i>
8:20–9:10	Skill Stations · Rotation 1 — Lung Ultrasound · FAST Exam · Apical, Subcostal & Parasternal Windows [Hands-on]
9:10–10:00	Skill Stations · Rotation 2 — same stations, groups A ↔ B [Hands-on]
10:00–10:15	Break
Block 2 — Critical Care Echo in Undifferentiated Shock [10:15 AM–12:15 PM]	
10:15–10:35	Critical Care Echocardiography in Undifferentiated Shock <i>Darian Alexander</i>
10:35–11:25	Skill Stations · Rotation 1 — LV Function · RV Function · Tamponade Assessment [Hands-on]
11:25–12:15	Skill Stations · Rotation 2 — same stations, groups A ↔ B [Hands-on]
12:15–1:15	Lunch + Vendor Walk
Block 3 — Hemodynamic Assessment: Fluid Responsiveness vs. Venous Congestion [1:15–3:15 PM]	
1:15–1:35	Hemodynamic Assessment with Critical Care Echo: Fluid Responsiveness vs. Venous Congestion <i>Mourad Senussi</i>
1:35–2:25	Skill Stations · Rotation 1 — Fluid Responsiveness · Cardiac Output · VExUS Protocol [Hands-on]
2:25–3:15	Skill Stations · Rotation 2 — same stations, groups A ↔ B [Hands-on]
3:15–3:30	Break
Block 4 — MCS Management & Rescue TEE [3:30–5:30 PM]	
3:30–3:40	Lecture A: The Role of Echocardiography in MCS Management <i>Kha Dinh</i>
3:40–3:50	Lecture B: When Every Beat Counts — Rescue TEE in the Critically Ill Patient <i>Kayla Knuf</i>
3:50–4:40	Skill Stations · Rotation 1 — Rescue TEE Scanning · Impella Position Under Echo Guidance [Hands-on]
4:40–5:30	Skill Stations · Rotation 2 — same stations, groups A ↔ B [Hands-on]
5:30–5:40	Final Comments and Wrap-Up

Track C — MCS Hands-On Workshops

Braeswood Room · Rotating Device Stations · 12:30–5:00 PM · In-person only

8:00 AM–12:30 PM	Attend Track A or B — workshops begin at 12:30 PM
Basic IABP	
12:30–12:40	Station 1 — Indications, Insertion, Vascular Access Strategy & Sizing [Hands-on]
12:40–12:50	Station 2 — Positioning & Imaging Confirmation [Hands-on]
12:50–1:00	Station 3 — Timing, Waveforms & Hemodynamics [Hands-on]
1:00–1:10	Station 4 — Troubleshooting & Complications [Hands-on]
1:10–1:20	Break
Impella	
1:20–1:30	Station 1 — Indications & Contraindications, Device Anatomy, Setup, Console Mastery [Hands-on]
1:30–1:40	Station 2 — Insertion, Positioning & Imaging [Hands-on]
1:40–1:50	Station 3 — Physiology & Hemodynamics [Hands-on]
1:50–2:00	Station 4 — Waveforms & Alarms [Hands-on]
2:00–2:10	Station 5 — Anticoagulation, Purge System & Hemolysis [Hands-on]
2:10–2:20	Break
RVAD	
2:20–2:30	Station 1 — RVAD Setup, Cannulation & Configurations [Hands-on]
2:30–2:40	Station 2 — RV Physiology & Hemodynamics [Hands-on]
2:40–2:50	Station 3 — Troubleshooting & Weaning [Hands-on]
LVAD	
2:50–3:00	Station 1 — Device Components & Surgical Anatomy [Hands-on]
3:00–3:10	Station 2 — Hemodynamics, Speed Optimization & Echo Integration [Hands-on]
3:10–3:20	Station 3 — Alarms [Hands-on]
3:20–3:30	Break
Total Artificial Heart	
3:30–4:00	Station 1 — Device Components & Surgical Anatomy [Hands-on]
Mega MCS Interactive Session	
4:00–5:00	Poly Device Management [Hands-on]