

33rd Annual ELSO Conference

Leading ECMO Globally

September 15th-17th, 2022
Boston Marriott Copley Place
Boston, MA



Mission

Providing global leadership in extracorporeal life support through innovation, advocacy, and advancing knowledge.

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Anil Trindade



Welcome

On behalf of the Organizing Committee, we are excited to welcome you to Boston for the 33rd Annual Extracorporeal Life Support Organization Conference. A robust and innovative scientific program has been assembled around the theme of Leading ECMO Globally, with distinguished speakers from around the world. Supporting this theme, as a pioneer in global critical care medicine and innovation, we are proud to have Dr. Derek Angus as our keynote speaker. We encourage you to engage and participate in the sessions and learn about the state of the art in ECMO science, physiology, program development, team management, and ethics. This is the first in person ELSO meeting in North America since the COVID-19 pandemic began and we are thrilled to reconnect as a global ELSO community. We hope you take advantage of this time together to collaborate and learn from each other, as it is our relationships that allow us to truly provide exceptional global ECMO care.

As always, we could not come together like this without the support of our sponsors. Not only do our sponsors help foster an environment to share knowledge, they are often on the leading edge of improvements in technology that matter at the bedside. Please take a moment to visit them throughout the conference.

Welcome!

Cara Agerstrand, MD
Chair, Conference Committee



Matthew Paden, MD
President, ELSO



Network: Marriott_CONFERENCE

Wi-Fi password: ELSO2022

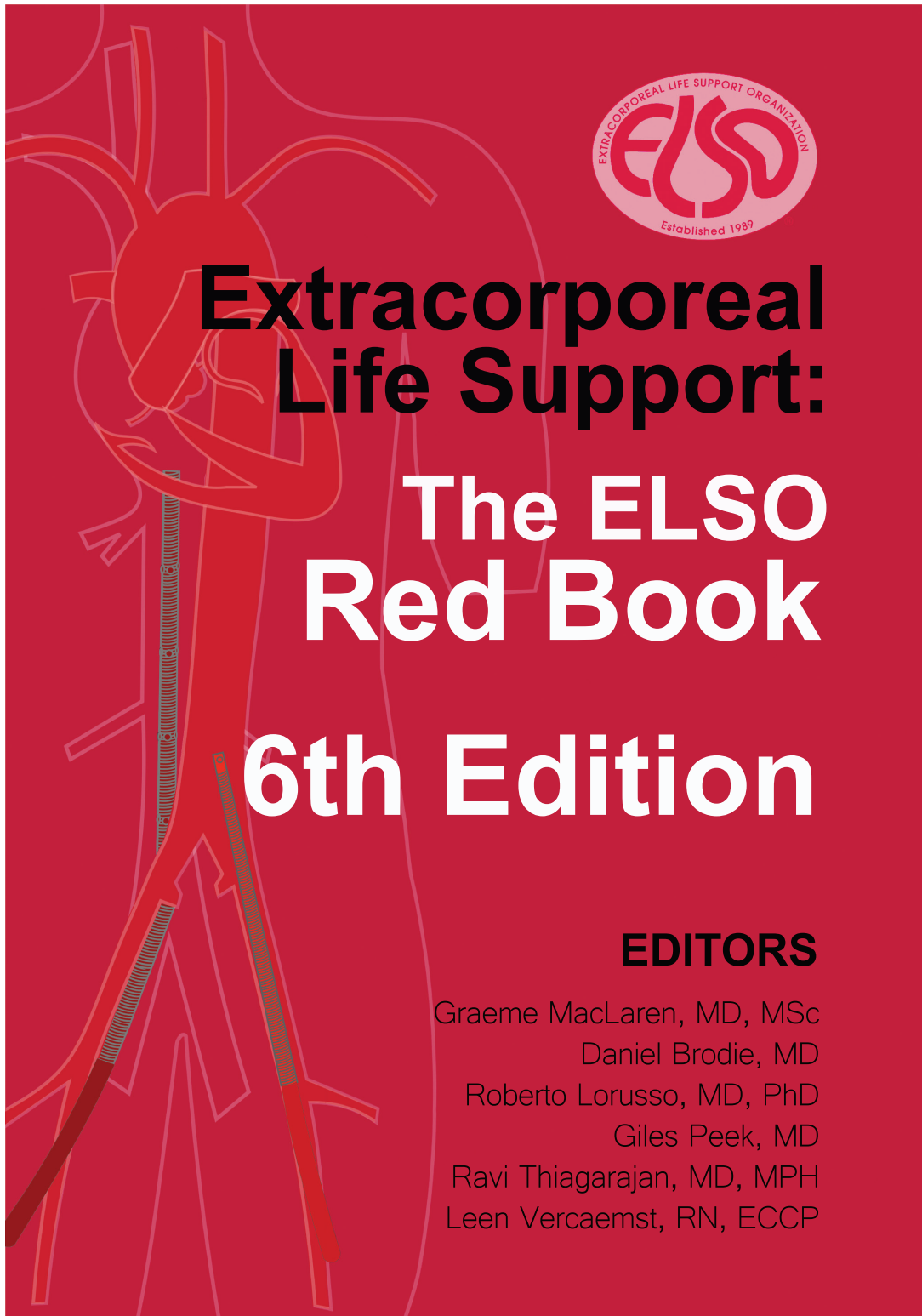
Share your experience across social media channels with #ELSO2022.

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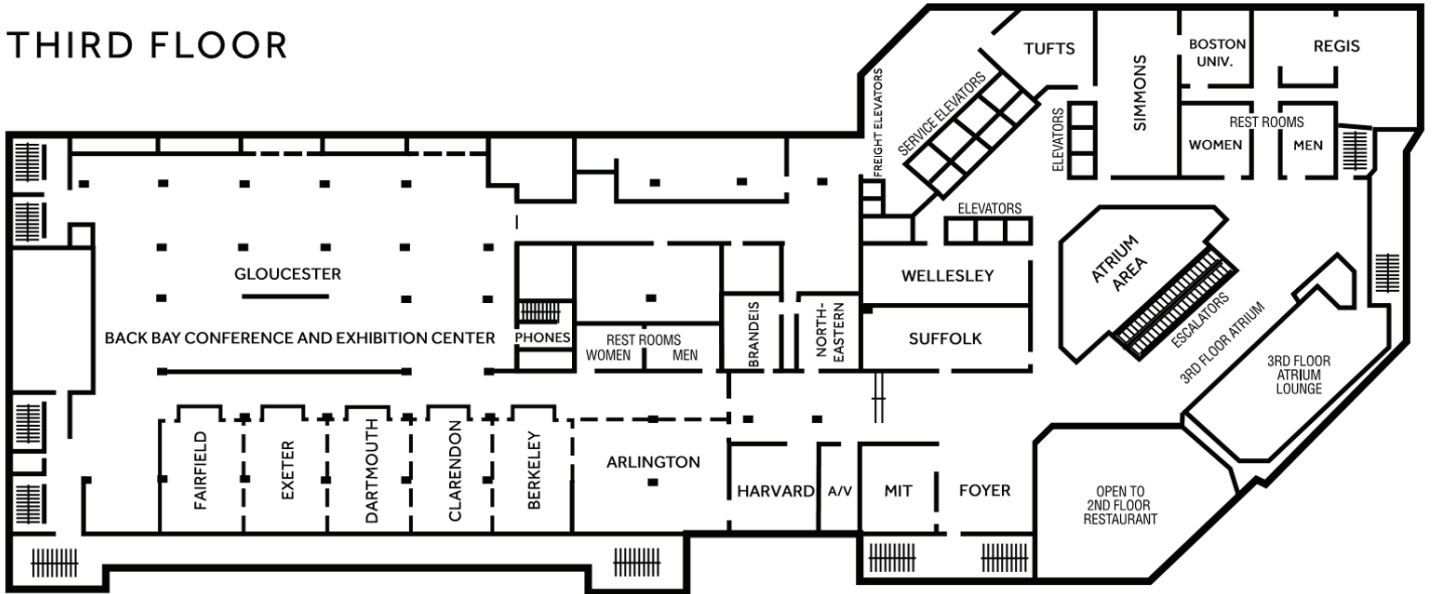
ELSO Red Book 6th Edition

ELSO is excited to launch the 6th Edition of the Red Book at our Annual Conference! Please come and pick up your copy, available at a discounted rate during the conference. With over 230 authors contributing to this edition, it is an important update to our field. Thank you to the Editor-in-Chief, Graeme MacLaren, and the entire Editorial Board for the vision, and all authors for your contribution.

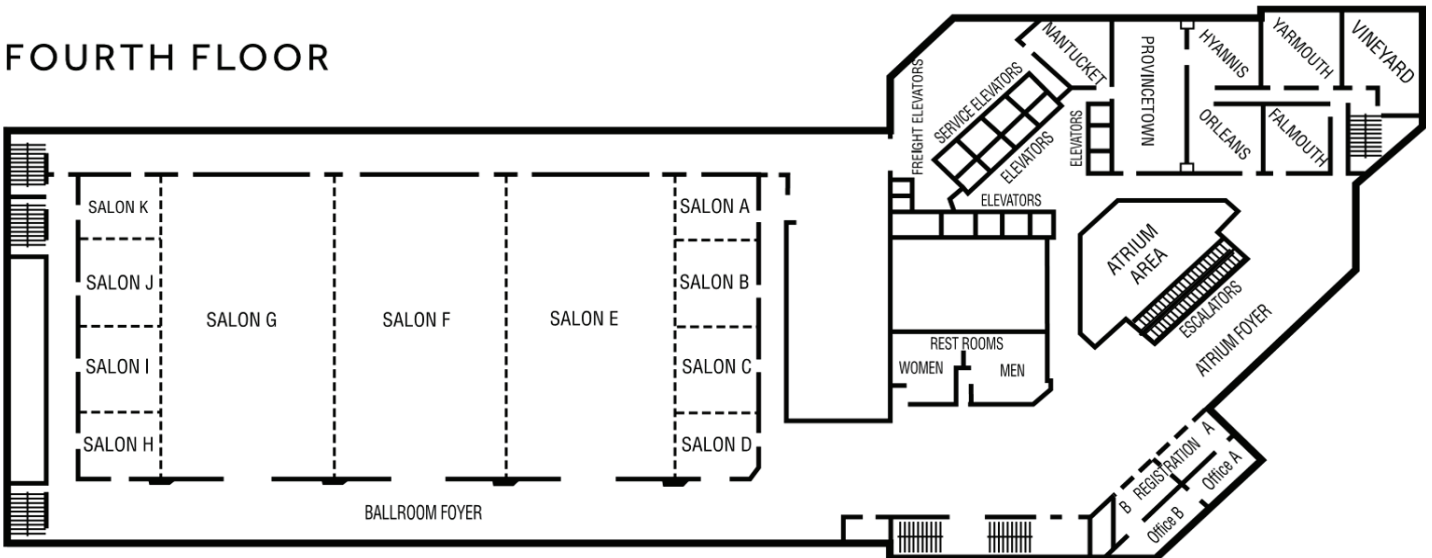


Marriott Copley Center Floor Maps

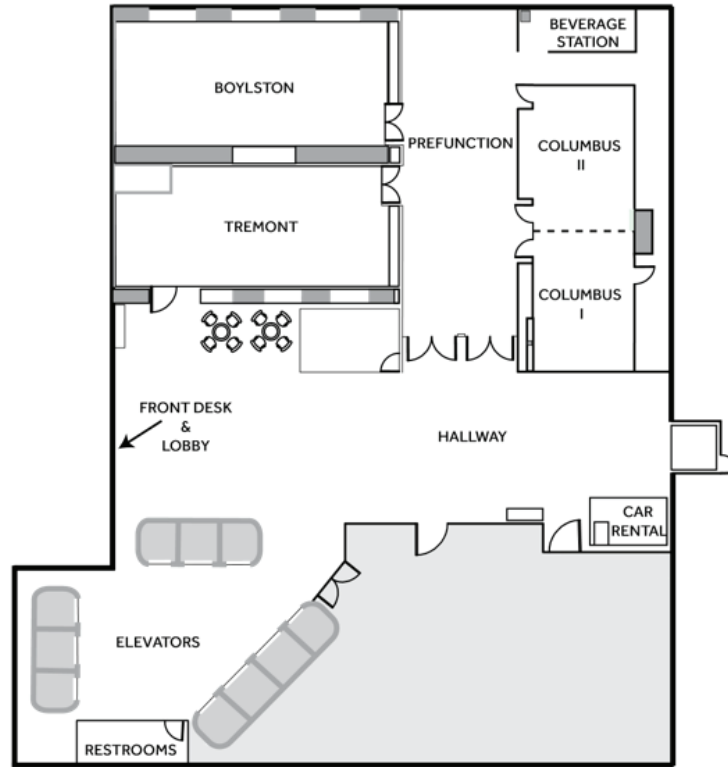
THIRD FLOOR



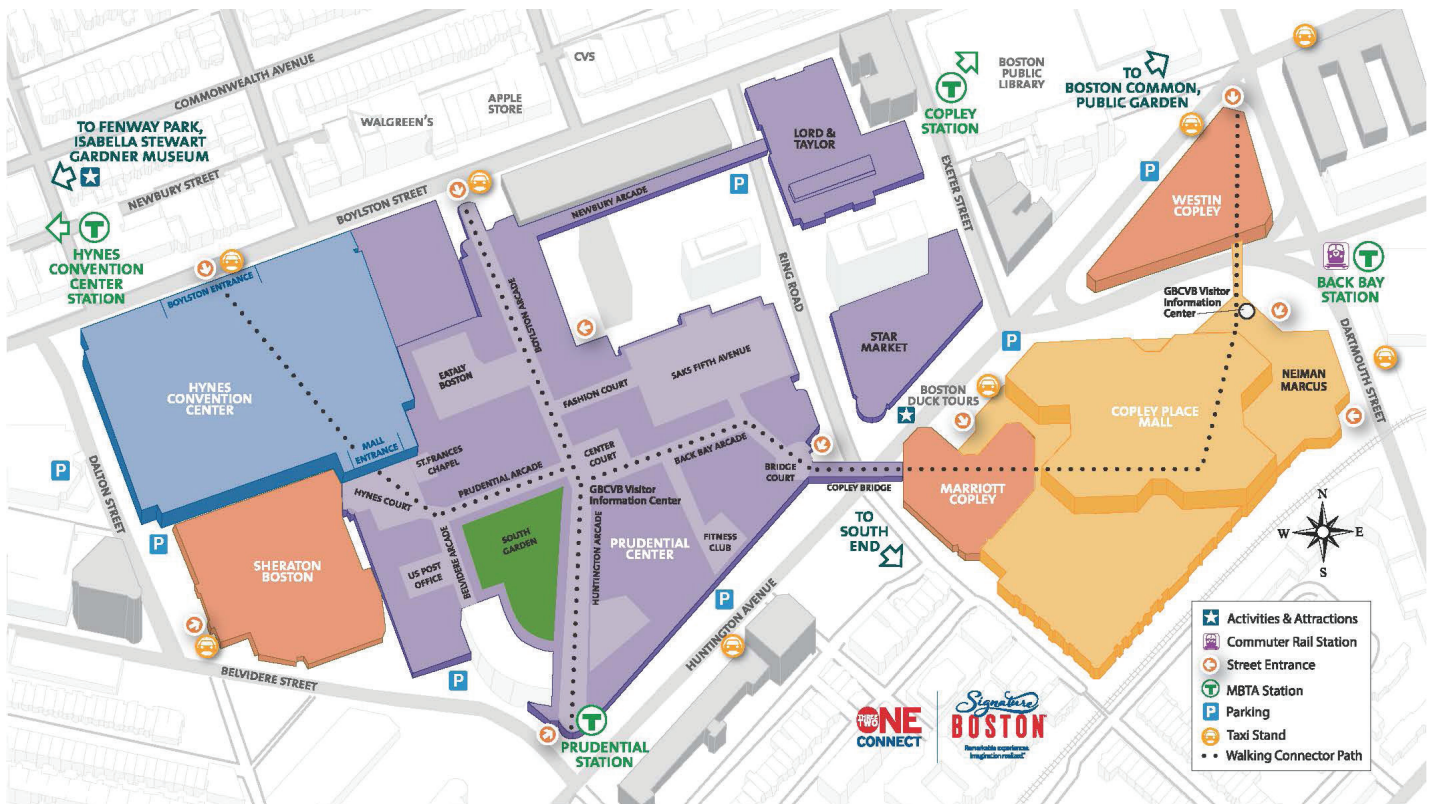
FOURTH FLOOR



FIRST FLOOR



Walking Route Between Marriott and Sheraton Hotels



AT A GLANCE AGENDA

ELSO 33RD ANNUAL CONFERENCE BOSTON, MA, USA

Pre-Conference - From Pumps to Program: How to Build (and Grow) a High Quality ECMO Program

Pre-Conference Day 1 - Wednesday September 14

	Salon E-G		
1:00-2:00 PM	Starting from Scratch: The Patient Population and Access to ECMO		
2:00-3:00 PM	Program Structure, Staffing, and Policy Development		
3:00 -3:30 PM	Break		
3:30-4:45 PM	Basics of ECMO: Preparing Your Team to Care for These Patients		
4:45-5:15 PM	Small Group Discussions		

Pre-Conference Day 2 - Thursday September 15

	Salon E-G		
7:00-8:00 AM	Breakfast		
8:00-9:00 AM	Education, Training and Competency		
9:00-10:15 AM	Advanced Management Strategies		
10:00-11:30 AM	Separate Registration Required for Heart Labs	Heart Lab #1 Boylston Room	Heart Lab #2 Tremont Room
10:15-10:45 AM	Break		
10:45-11:45 AM	Would You or Wouldn't You? Interactive Cases		
11:45 AM	Pre-Conference Concludes		

ELSO 33rd Annual Conference - "Leading ECMO Globally"

Day 1 - Thursday September 15, 2022 (1:00 PM to 5:30 PM)

1:00-2:30 PM	Opening Remarks & Keynote Address Plenary Session: Science at the Cutting Edge: ECLS and Beyond Salon A-K		
2:30-3:00 PM	Break with Exhibitors and Poster Presentations Exhibit Hall		
3:00-4:00 PM	Breakout 1, Salon A-E ECMO and the Pregnant Patient: Two Lives at Stake	Breakout 2, Salon F Congenital Heart Disease: From Cradle to Drivers Licenses and Beyond	Breakout 3, Salon G-K Maintaining a High Functioning ICU Team: What the Pandemic Revealed
4:00-4:10 PM	Transition Time		
4:00-5:30 PM	Separate Registration Required for Heart Labs	Heart Lab #3 Boylston Room	Heart Lab #4 Tremont Room
4:10-5:30 PM	Breakout 4, Salon A-E Cutting Edge in ARDS: The Science and the Management	Breakout 5, Salon F Cardiogenic Shock Demystified	Breakout 6, Salon G-K All About the Oxygen: Optimizing Perfusion During ECMO
5:30-7:00 PM	Poster Presentations		
5:30-6:30 PM	PediECMO Meeting, Salon E		

Day 2 - Friday September 16, 2022

7:00-8:00 AM	Breakfast Meet and Greet with the Steering Committee Exhibit Hall		
8:15-9:30 AM	Plenary Day 2: Critical Care in the Media Salon A-K		
9:30-10:00 AM	Break with Exhibitors and Poster Presentations		
10:00-11:00 AM	Breakout 7, Salon A-E ECCO2R: State of the Science for Respiratory Failure	Breakout 8, Salon F Challenges in Venoarterial ECMO and MCS	Breakout 9, Salon G-K Congenital Diaphragmatic Hernia: ECMO Challenges & Considerations

At A Glance Agenda (continued)

11:00-11:10 AM	Transition Time		
11:10-12:10 PM	Breakout 10, Salon A-E	Breakout 11, Salon F	Breakout 12, Salon G-K
	COVID-19: What's the Evidence in 2022?	Leveraging Data for Management of the Sickest Patients in the ICU	Adventures in ECMO: Bedside Essentials
12:10-1:30 PM	Lunch Break, Exhibit Hall and Poster Presentations		
12:30-1:15 PM	Sponsored Talk #1, Salon A-E		Sponsored Talk #2 Salon G-K
	Future Trends in ECLS and Post-Pandemic Transitions (Talk Sponsored by Getinge)		ECpella™ Therapy: Optimal Timing & Management to Rest & Recover with Impella (Talk Sponsored by Abiomed)
1:30-2:50 PM	Breakout 13, Salon A-E	Breakout 14, Salon F	Breakout 15, Salon G-K
	Innovation in ECMO	State of the Art in Resuscitation: ECPR at the Cutting Edge	Humanity in the ICU: Ethics and Palliative Care
2:50-3:20 PM	Break with Exhibitors and Poster Presentations		
3:20-4:20 PM	Breakout 16, Salon A-E	Breakout 17, Salon F	Breakout 18, Salon G-K
	Surgical Controversies in ECMO: Management Strategies and Expert Discussion	Expanded Uses for VA ECMO: A New Weapon in Our Hands for Complex Conditions	ELSO Research Grant and Oral Abstract Presentations
4:20-4:30 PM	Transition Time		
4:30-5:30 PM	Breakout 19, Salon A-E	Breakout 20, Salon F	Breakout 21, Salon G-K
	ECMO in Pandemics: Preparing for the Next One	Neurologic Injury During ECMO	Neonatal ECMO: Next Gen Approaches for the Next Gen - Expert Panel and Moderated Discussion
6:00-7:00 PM	Evening Reception, Exhibit Floor		
7:00-8:00 PM	Award Ceremony, Salon E - F - G		
Day 3 - Saturday September 17, 2022 (8 AM to 12 PM)			
7:00-8:00 AM	Directors' Meeting with Breakfast, Salon E	Coordinators' Meeting with Breakfast, Salon G	Breakfast - For All Other Attendees, Exhibit Hall
8:30-9:30 AM	Breakout 22, Salon A-E	Breakout 23, Salon F	Breakout 24, Salon G-K
	ECMO for Lung Transplantation	ECMO, VAD, and Everything in Between: How Can Evidence Inform the Best MCS Strategy for Children with Heart Failure	ELSO Registry Session
9:30-9:40 AM	Transition Time		
9:40-10:40 AM	Breakout 25, Salon A-E	Breakout 26, Salon F	Breakout 27, Salon G-K
	A Breath of Fresh Air: Hot Topics in Pediatric Respiratory ECMO	Award of Excellence	Let's Get Moving: Physical Rehabilitation During ECMO
10:40-10:50 AM	Transition Time		
10:50-11:50 AM	Closing Remarks Salon A-E		

Detailed Agenda Page 1

AGENDA

ELSO 33RD ANNUAL CONFERENCE BOSTON, MA, USA

Pre-Conference - From Pumps to Program: How to Build (and Grow) a High Quality ECMO Program

Pre-Conference Day 1 - Wednesday September 14

Salon E-G

1:00-2:00 PM	Starting from Scratch: The Patient Population and Access to ECMO
1:00-1:05 PM	Welcome and Introduction <i>Elizabeth Moore, RN, MBA Iowa City, IA, USA</i>
1:05-1:20 PM	If We Build It, Will They Come? Is Starting an ECMO Program Right for Your Hospital? <i>Susan Tanzi-Pfeifer, MBA Morristown, NJ, USA</i>
1:20-1:35 PM	EC-YES or EC-NO: Indications and Contraindications for ECMO <i>Joseph Tonna, MD, MS Salt Lake City, UT, USA</i>
1:35-1:50 PM	ECMO on Wheels: Considerations in ECMO Transport Program <i>Jason Bartos, MD Minneapolis, MN, USA</i>
1:50-2:00 PM	Panel Discussion
2:00-3:00 PM	Program Structure, Staffing, and Policy Development
2:05-2:20 PM	It Takes a Team: Structuring Your Program for Success <i>Elizabeth Moore, RN, MBA Iowa City, IA, USA</i>
2:20-2:35 PM	How Do I Know What Staffing Paradigm is Right for Our Program? <i>Jayne Sheldrake, MSc, RN Melbourne, Australia</i>
2:35-2:50 PM	Always in Fashion: All You Need to Know About ECMO Circuits and ECMO Accessories <i>Justin Sleasman, CCP Stanford, CA, USA</i>
2:50-3:00 PM	Panel Discussion
3:00-3:30 PM	Break
3:30-4:45 PM	Basics of ECMO: Preparing Your Team to Care for These Patients
3:30-3:45 PM	Oxygen In, CO2 Out: ECMO Physiology and Gas Exchange <i>Robert Bartlett, MD, FELLO Ann Arbor, MI, USA</i>
3:45-4:00 PM	Essential Patient Management in VV ECMO <i>Cara Agerstrand, MD New York, NY, USA</i>
4:00-4:15 PM	When the Heart Fails: Managing a Patient on VA ECMO <i>Raj Ramanan, MD Pittsburgh, PA, USA</i>
4:15-4:30 PM	Anticoagulation: Dealing with Bleeding and Thrombosis <i>Troy Seelhammer, MD Rochester, MN, USA</i>
4:30-4:45 PM	Panel Discussion
4:45-5:15 PM	Small Group Discussions

Pre-Conference Day 2 - Thursday September 15

Salon E-G

7:00-8:00 AM	Breakfast
8:00-9:00 AM	Education, Training and Competency
8:05-8:20 AM	What is the Value of Global, Standardized ECMO Education? <i>Bishoy Zakhary, MD Portland, OR, USA</i>
8:20-8:35 AM	The E-AEC: Everything You Need to Know About Certification <i>Jenelle Badulak, MD Seattle, WA, USA</i>
8:35-8:50 AM	ECMO Simulation: It's More than Technical Training <i>Mateusz Puslecki, MD, PhD, DBA and Marek Dabrowski, DBA, PhD, MPH, MSc Poznan, Poland</i>
8:50-9:00 AM	Panel Discussion
9:00-10:15 AM	Advanced Management Strategies
9:00-9:15 AM	Imaging on ECMO: What, How, and When <i>Adam Dalia, MD, MBA Boston, MA, USA</i>
9:15-9:30 AM	Help! Critical Response to ECMO Emergencies <i>Velia Antonini, MS, CCP Cesena, Italy</i>
9:30-9:45 AM	Unique Issues: The Awake or Extubated ECMO Patient <i>Phillip Mason, MD San Antonio, TX, USA</i>
9:45-10:00 AM	All You Need to Know About ECMO Weaning <i>Craig Rackley, MD Durham, NC, USA</i>
10:00-10:15 AM	Panel Discussion
10:00-11:30 AM	Heart Lab #1, Boylston Room
10:00-11:30 AM	Heart Lab #2, Tremont Room
	<i>Kasia Hryniewicz, MD Jonathan Haft, MD</i>
	<i>Karol Mudy, MD Michael McMullan, MD</i>

Detailed Agenda Page 2

10:15-10:45 AM	Break
10:45-11:45 AM	Would You or Wouldn't You? Interactive Cases
10:45-11:00 AM	Challenging Cases in Neo-Peds ECMO <i>Natalie Rintoul, MD Philadelphia, PA, USA</i>
11:00-11:15 AM	Challenging Cases - VV ECMO <i>Kiran Shekar, MBBS, PhD Brisbane, Australia</i>
11:15-11:30 AM	Challenging Cases - VA ECMO <i>E. Wilson Grandin, MD Boston, MA, USA</i>
11:30-11:45 AM	Panel Discussion
11:45 AM	Pre-Conference Concludes

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Day 1 - Thursday September 15, 2022 (1:00 PM to 5:30 PM)

1:00-2:30 PM	Opening Remarks & Keynote Address Salon A-K
1:00-1:05 PM	Welcome Remarks <i>Matthew Paden, MD Atlanta, GA, USA</i>
1:05-1:35 PM	Keynote Address <i>Derek Angus, MD, MPH Pittsburgh, PA, USA</i>
	Plenary Session: Science at the Cutting Edge: ECLS and Beyond Moderators: Susanna Price, MD London, UK and Navin Kapur, MD Boston, MA, USA
1:35-1:45 PM	50th Anniversary of 1st ECMO Case <i>J. Donald Hill, MD, FELLO San Francisco, CA</i>
1:45-1:55 PM	New Frontiers of ECLS in Cardiovascular Medicine <i>Roberto Lorusso, MD, PhD, FELLO Maastricht, Netherlands</i>
1:55-2:05 PM	Pediatric ECMO Research and Trial Design <i>Peta Alexander, MBBS Boston, MA, USA</i>
2:05-2:15 PM	Pushing Boundaries: Experience in Xenotransplantation <i>Bart Griffith, MD Baltimore, MD, USA</i>
2:15-2:30 PM	Panel Discussion
2:30-3:00 PM	Break with Exhibitors and Poster Presentations

3:00-4:00 PM	Breakout 1, Salon A-E	Breakout 2, Salon F	Breakout 3, Salon G-K
	ECMO and the Pregnant Patient: Two Lives at Stake <i>Bjorn Frenckner, MD, PhD, FELLO</i> <i>Stockholm, Sweden</i> <i>Kollengode Ramanathan, MBBS, DNB</i> <i>Singapore</i>	Congenital Heart Disease: From Cradle to Drivers Licenses and Beyond <i>René Gómez Gutiérrez, MD</i> <i>Monterrey, Mexico</i> <i>Ravi Thiagarajan, MD, FELLO</i> <i>Boston, MA, USA</i>	Maintaining a High Functioning ICU Team: What the Pandemic Revealed <i>Jim Fortenberry, MD, FELLO</i> <i>Atlanta, GA, USA</i>
3:00-3:08 PM	ECMO in Pregnancy: Evidence and Management Approaches <i>Cara Agerstrand, MD</i> <i>New York, NY, USA</i>	3:00-3:08 PM How Does a Robust ECMO Service Support Congenital Cardiac Surgery Programs? <i>Michael McMullan, MD</i> <i>Seattle, WA, USA</i>	3:00-3:08 PM The Shadow Side: PTSD and Moral Injury in Critical Care <i>Ahmed Labib, MB, BCh, MSc</i> <i>Doha, Qatar</i>
3:10-3:18 PM	A Dangerous Combination: Management Considerations in the Pregnant Patient with Pulmonary Hypertension <i>Erika Berman, MD</i> <i>New York, NY, USA</i>	3:10-3:18 PM How are we Approaching Neonatal ECMO for Babies with Congenital Heart Disease? <i>Eleonore Valencia, MD</i> <i>Boston, MA, USA</i>	3:10-3:18 PM Pandemic Challenges and Solutions in ECMO Nursing <i>TBD</i>
3:20-3:28 PM	Looking After the Little One: Fetal Monitoring and Physiologic Optimization <i>Farah Siddiqui, MD</i> <i>London, UK</i>	3:20-3:28 PM TBD <i>Diana Geisser, MD</i> <i>Boston, MA, USA</i>	3:20-3:28 PM Creating a Culture of Resilience in Your ECMO Team <i>Katherine Porterfield, PhD</i> <i>New York, NY, USA</i>
3:30-3:38 PM	The Baby's Coming: Delivery Planning on ECMO and Consultation for High Risk Deliveries <i>Priya Nair, MD</i> <i>Sydney, Australia</i>	3:30-3:38 PM How do we Support Patients and Families as They Return for Planned Surgeries After a Complicated Post-Op Course? <i>Nneka Alexander, PhD</i> <i>Atlanta, GA, USA</i>	3:30-3:38 PM Where Do We Go From Here: How the Pandemic Will Change ICU Care <i>Heidi Dalton, MD, FELLO</i> <i>Scottsdale, AZ, USA</i>

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3:40-3:48 PM	Remarkable Case: The Power of What's Possible <i>Peter Barrett, MD Atlanta, GA, USA</i>	3:40-3:48 PM	How is ECMO for Congenital Heart Disease Different When My Patient Has a Beard? <i>Marc Anders, MD Houston, TX, USA</i>	3:40-4:00 PM	Panel Discussion
3:50-4:00 PM	Panel Discussion	3:50-4:00 PM	Panel Discussion	Separate Registration Required for Heart Labs	
4:00-4:10 PM	Transition Time	4:00-5:30 PM	Heart Lab #3, Boylston Room <i>Kasia Hryniewicz, MD Jonathan Haft, MD</i>	4:00-5:30 PM	Heart Lab #4, Tremont Room <i>Karol Mudy, MD Michael McMullan, MD</i>
4:10-5:30 PM	Breakout 4, Salon A-E Cutting Edge in ARDS: The Science and the Management <i>Daniel Brodie, MD, FELLO New York, NY, USA</i>	4:10-5:30 PM	Breakout 5, Salon F Cardiogenic Shock Demystified <i>Alain Combes, MD, PhD, FELLO Paris, France</i>	4:10-5:30 PM	Breakout 6, Salon G-K All About the Oxygen: Optimizing Perfusion During ECMO <i>Justin Sleasman, CCP Stanford, CA, USA</i>
4:10-4:18 PM	Prolonged ECMO for ARDS: Clinical Strategies for Success <i>Eddy Fan, MD, PhD Toronto, Canada</i>	4:10-4:18 PM	Pathophysiology of Cardiogenic Shock: From Bench to Simulation Modeling <i>Daniel Burkhoff, MD, PhD New York, NY, USA</i>	4:10-4:18 PM	Tissue Oxygenation During ECMO: Monitoring and Clinical Impact <i>Dana Mullin, CCP New York, NY, USA</i>
4:20-4:28 PM	Prone Positioning During ECMO: To Flip or Not To Flip <i>Kollengode Ramanathan, MBBS, DNB Singapore</i>	4:20-4:28 PM	The Inflammatory Field of Microcirculatory Disturbance in Cardiogenic Shock: How ECMO Can Win This Battle <i>John Fraser, MB, ChB, PhD, FELLO Brisbane, Australia</i>	4:20-4:28 PM	Getting Rid of Limb Ischemia in Peripheral VA ECMO: Utopia or Fact <i>Giles Peek, MD, FELLO Gainesville, FL, USA</i>
4:30-4:38 PM	Personalized Approaches to Protective Ventilation and Respiratory Mechanics in ARDS <i>Sarina Sahetya, MD, MHS Baltimore, MD, USA</i>	4:30-4:38 PM	Cardiogenic Shock Definitions: SCAI Criteria Revised <i>Jennifer Cowger, MD, MS Detroit, MI, USA</i>	4:30-4:38 PM	Transfusion Practices in ECMO: What We've Learned from PROTECMO <i>Gennaro Martucci, MD Palermo, Italy</i>
4:40-4:48 PM	Impact of Spontaneous Breathing During Ventilation on Lung Injury, with and without ECMO <i>Ewan Goligher, MD, PhD Toronto, Canada</i>	4:40-4:48 PM	VA ECMO, Impella, or Both: What is the Algorithm? <i>Navin Kapur, MD Boston, MA, USA</i>	4:40-4:48 PM	Refractory Hypoxemia on VV ECMO: Medical and Mechanical Solutions <i>Heidi Dalton, MD, FELLO Scottsdale, AZ, USA</i>
4:50-5:18 PM	Debate: Prolonged COVID-19 ARDS: Bridge to Recovery or Bridge to Transplant? <i>Ankit Bharat, MD Chicago, IL, USA</i>	4:50-4:58 PM	Biventricular Dysfunction: Pitfalls, Approach, and Management <i>Leonardo Salazar, MD Bucaramanga, Colombia</i>	4:50-5:18 PM	Debate: Bivalirudin vs Heparin for ECMO Anticoagulation: Are We Ready To Go to DTIs? <i>Bishoy Zakhary, MD Portland, OR, USA</i>
	<i>Nicholas Barrett, MD London, UK</i>	5:00-5:08 PM	Future Therapies in Cardiogenic Shock: Next Gen Approaches <i>Susanna Price, MD London, UK</i>		<i>Gail Annich, MD, FELLO Toronto, Canada</i>
5:20-5:30 PM	Panel Discussion	5:10-5:30 PM	Panel Discussion	5:20-5:30 PM	Panel Discussion
5:30-7:00 PM	Exhibit Hall Poster Presentations	5:30-6:30 PM	Salon E PediECMO Meeting		

Day 2 - Friday September 16, 2022

7:00-8:00 AM	Breakfast Meet and Greet with the Steering Committee Exhibit Hall
8:15-9:30 AM	Plenary Day 2: Critical Care in the Media Salon A-K Moderators: Graeme MacLaren, MBBS, MSc, FELLO Singapore and Cara Agerstrand, MD New York, NY, USA
8:15-8:35 AM	The Influence of Media and Social Media on our Practices <i>Daniel Brodie, MD, FELLO New York, NY, USA</i>

Detailed Agenda Page 4

8:35-8:55 AM	A Journalist's Perspective: What Healthcare Providers Need to Know <i>Gideon Gil, MS Boston, MA, USA</i>
8:55-9:10 AM	Update from ELSO <i>Christine Stead, MHSA Ann Arbor, MI, USA</i>
9:10-9:30 AM	Panel Discussion

9:30-10:00 AM Break with Exhibitors and Poster Presentations

10:00-11:00 AM	Breakout 7, Salon A-E	Breakout 8, Salon F	Breakout 9, Salon G-K
	ECCO2R: State of the Science for Respiratory Failure <i>Jenelle Badulak, MD</i> Seattle, WA, USA <i>Thomas Mueller, MD, FELLO</i> Regensburg, Germany	Challenges in Venoarterial ECMO and MCS <i>Kasia Hryniewicz, MD</i> Minneapolis, MN, USA <i>Vincent Pellegrino, MD</i> Melbourne, Australia	Congenital Diaphragmatic Hernia: ECMO Challenges & Considerations <i>Holly Hedrick, MD</i> Philadelphia, PA, USA <i>Matteo Di Nardo, MD</i> Rome, Italy
10:00-10:08 AM	ECCO2R for ARDS: Where do we go from REST? TBD	10:00-10:08 AM Supporting, Bridging, Weaning: A Practical Approach to Patients Receiving Temporary MCS <i>Alain Combes, MD, PhD, FELLO</i> Paris, France	10:00-10:08 AM What We Know About Center Volume and ECMO Outcomes <i>Yigit Guner, MD</i> Orange, CA, USA
10:10-10:18 AM	10:10-10:18 AM What's Next in Clinical Trials in ECCO2R for COPD TBD	10:10-10:18 AM When to Think of Myocardial Recovery: Unloading and Reloading <i>Jane Wilcox, MD, MSc</i> Chicago, IL, USA	10:10-10:18 AM Surgery on ECMO: Timing and Technique <i>Holly Hedrick, MD</i> Philadelphia, PA, USA <i>Katie Russell, MD</i> Salt Lake City, UT, USA
10:20-10:28 AM	10:20-10:28 AM On the Horizon: Device Development in ECCO2R <i>Steven Keller, MD, PhD, MPhil</i> Baltimore, MD, USA	10:20-10:28 AM Axillary Access: When and How <i>Koji Takeda, MD, PhD</i> New York, NY, USA	10:20-10:28 AM How to Manage the Neonatal Lung: Ventilator Strategies on ECMO <i>Diana Vargas, MD</i> New York, NY, USA <i>Matteo Di Nardo, MD</i> Rome, Italy
10:30-10:38 AM	10:30-10:38 AM Impact of ECCO2R on Pulmonary Hypertension and the Right Ventricle <i>Corey Ventetuolo, MD, MS</i> Providence, RI, USA	10:30-10:38 AM ECMO in Extreme Obesity: Does BMI Matter? <i>Roberto Lorusso, MD, PhD, FELLO</i> Maastricht, Netherlands	10:30-10:38 AM On the Road to Recovery: The Threshold for Decannulation <i>Thomas Schaible, MD</i> Mannheim, Germany
10:40-11:00 AM	10:40-11:00 AM Panel Discussion	10:40-11:00 AM Panel Discussion	10:40-11:00 AM Panel Discussion <i>Thomas Schaible, MD</i> <i>Diana Vargas, MD</i> <i>Matteo Di Nardo, MD</i> <i>Lakshmi Raman, MD</i>

11:00-11:10 AM Transition Time

11:10 AM-12:10 PM	Breakout 10, Salon A-E	Breakout 11, Salon F	Breakout 12, Salon G-K
	COVID-19: What's the Evidence in 2022? <i>Eddy Fan, MD, PhD</i> Toronto, Canada	Too Much of a Good Thing? Leveraging Data for Management of the Sickest Patients in the ICU <i>Joseph Tonna, MD, MS</i> Salt Lake City, UT, USA	Adventures in ECMO: Bedside Essentials <i>David Hebert, RRT, NPS</i> New Orleans, LA, USA <i>Erik Osborn, MD</i> Fairfax, VA, USA

Detailed Agenda Page 5

11:10-11:18 AM	ECMO for ARDS in COVID-19: Effective Therapy or Wishful Thinking? <i>Martin Urner, MD</i> Toronto, Canada	11:10-11:15 AM	QI to Come: Improving Care with Machine Learning Models <i>Joshua Fuller</i> New York, NY, USA	11:10-11:18 AM	Patient Assessment, Head to Toe: What I Want My Team to Know <i>Whitney Gannon, MSN, ACNP-BC</i> Nashville, TN, USA
11:20-11:28 AM	Phenotypes in COVID-19 ARDS: What We've Learned <i>David Furfaro, MD</i> Boston, MA, USA	11:15-11:23 AM	How Can we Innovate ECMO Components to Leverage and Support AI at the Bedside? <i>James Beck, CCP</i> New York, NY, USA	11:20-11:28 AM	Continuous Renal Replacement Therapy and Plasmapheresis on ECMO: Bedside Essentials <i>Leen Vercaemst, CCP</i> Leuven, Belgium
11:30-11:38 AM	Cytokine Storm in COVID-19: Fact or Fiction <i>Daniel Leisman, MD</i> Boston, MA, USA	11:25-11:33 AM	How Can EHR-Derived AI Inform Learning Healthcare Models in ECMO? <i>Shelly DeForte, PhD, MS</i> Columbus, OH, USA	11:30-11:38 AM	Protecting the Largest Organ: Skin and Cannula Care <i>Erin August, RN, MSN</i> Hollywood, FL, USA
11:40-11:48 AM	Severe COVID in the Pediatric Population <i>Melania Bembea, MD, PhD, MPH</i> Baltimore, MD, USA	11:35-11:43 AM	What Are the Barriers to AI Informed Management Models of ECMO at Payer and Corporate Governance Levels? <i>Jeffrey Geppert, JD, MEd</i> Columbus, OH, USA	11:40-11:48 AM	Managing the Awake Patient on ECMO <i>Jayne Sheldrake, MSc, RN</i> Melbourne, Australia
11:48 AM-12:10 PM	Panel Discussion	11:45-11:53 AM	Standardized Clinical Assessment and Management Plans (SCAMPs): A Learning Healthcare Model Applied to ECMO <i>Peta Alexander, MBBS</i> Boston, MA, USA	11:50-11:58 AM	Lessons Learned in ECMO Transport: Specialists on the Move <i>Bradley Kuch, RRT, NPS</i> Pittsburgh, PA, USA
11:55 AM-12:10 PM		11:55 AM-12:10 PM	Panel Discussion	11:58 AM-12:10 PM	Panel Discussion
12:10-1:30 PM	Exhibit Hall and Poster Presentations, Lunch Break Sponsored Talks Salon A-E, Salon G-K				
	Sponsored Talk #1 (Salon A-E) Future Trends in ECLS and Post-Pandemic Transitions (Talk Sponsored by Getinge) <i>Jason Bartos, MD Minneapolis, MN, USA</i> <i>Christina Creel-Bulos, MD Atlanta, GA, USA</i>	12:30 - 1:15 PM		Sponsored Talk #2 (Salon G-K) ECpella™ Therapy: Optimal Timing & Management to Rest & Recover with Impella (Talk Sponsored by Abiomed) <i>Speakers TBD</i>	
1:30-2:50 PM	Breakout 13, Salon A-E Innovation in ECMO <i>Palle Palmer, MD</i> <i>Solna, Sweden</i>	Breakout 14, Salon F State of the Art in Resuscitation: ECPR at the Cutting Edge <i>Simon Finney, MB, ChB, PhD</i> <i>London, UK</i>		Breakout 15, Salon G-K Humanity in the ICU: Ethics and Palliative Care <i>Luiz Caneo, MD, PhD</i> <i>Sao Paulo, Brazil</i> Mark Ogino, MD, FELS <i>Wilmington, DE, USA</i>	
1:30-1:38 PM	The Next Frontier in ECMO Devices and Non-Invasive Monitoring <i>James Beck, CCP</i> New York, NY, USA	1:30-1:38 PM	Pathophysiology and Hemodynamics of Cardiac Arrest <i>Andrea Elliot, MD</i> Minneapolis, MN, USA	1:30-1:38 PM	Palliative Care: Integrative Approaches in ECMO and Critical Care <i>Whitney Kiker, MD</i> Seattle, WA, USA
1:40-1:48 PM	Innovations in the ECMO Lab: Insights from Dr. Bartlett <i>Robert Bartlett, MD, FLSO</i> Ann Arbor, MI, USA	1:40-1:48 PM	ECPR for OHCA: Time to Change the Practice? <i>Jan Belohlavek, MD, PhD</i> Prague, Czech Republic	1:40-1:48 PM	Organ Donation from ECMO: Brain Death and DCD <i>Emily Vail, MD, MSc</i> Philadelphia, PA, USA

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1:50-1:58 PM	<p>Translating Your Ideas to Patient Care</p> <p><i>Janene Fuerch, MD Stanford, CA, USA</i></p>	1:50-1:58 PM	<p>There's no "I" in ECPR: Developing a High Functioning ECPR Team</p> <p><i>Vincent Pellegrino, MD Melbourne, Australia</i></p>	1:50-1:58 PM	<p>Challenging Case: End of Life in Pediatric ECMO</p> <p><i>Grace van Leeuwan, MD Doha, Qatar</i></p>
2:00-2:08 PM	<p>It Takes a Village (and a Grant): Getting Your ECMO Study Funded</p> <p><i>Melania Bembea, MD, PhD, MPH Baltimore, MD, USA</i></p>	2:00-2:08 PM	<p>Pediatric ECPR: Where we Stand with Research and Trial Design</p> <p><i>John Kheir, MD Boston, MA, USA</i></p>	2:00-2:08 PM	<p>From the Family's Perspective: What I Would Want the ICU to Know</p> <p><i>David Furfaro, MD Boston, MA, USA</i></p>
2:10-2:18 PM	<p>Innovation in ECMO from the FDA's Perspective</p> <p><i>Nicole Gillette, BS Silver Spring, MD, USA</i></p>	2:10-2:28 PM	<p>Debate: ECPR versus Opening the Chest for Post-Cardiotomy Arrest? Is there a Gold Standard?</p> <p><i>Karol Mudy, MD Minneapolis, MN, USA Jonathan Haft, MD Ann Arbor, MI, USA</i></p>	2:10-2:28 PM	<p>Debate - How Do We Justly Allocate ECMO in Resource Limited Settings: Should Expected Survival and Quality of Life Impact ECMO Candidacy?</p> <p><i>Wynne Morrison, MD, MBE Philadelphia, PA, USA Kiran Shekar, MBBS, PhD Queensland, Australia</i></p>
2:20-2:50 PM	<p>Panel Discussion</p>	2:30-2:50 PM	<p>Panel Discussion</p>	2:30-2:50 PM	<p>Panel Discussion</p>
2:50-3:20 PM	Break with Exhibitors and Poster Presentations				
3:20-4:20 PM	<p>Breakout 16, Salon A-E</p> <p>Surgical Controversies in ECMO: Management Strategies and Expert Discussion</p> <p><i>Heidi Dalton, MD, FELS Scottsdale, AZ, USA Bishoy Zakhary, MD Portland, OR, USA</i></p>	<p>Breakout 17, Salon F</p> <p>Expanded Uses for VA ECMO: A New Weapon in Our Hands for Complex Conditions</p> <p><i>Roberto Lorusso, MD, PhD, FELS Maastricht, Netherlands Pranya Sakiyalak, MD Bangkok, Thailand</i></p>	<p>Breakout 18, Salon G-K</p> <p>ELSO Research Grant and Oral Abstract Presentations</p> <p><i>Eddy Fan, MD, PhD Toronto, Canada</i></p>		
3:20-3:28 PM	<p>Put a Tube In It? Chest Tubes and Management of the Pleural Space</p> <p><i>Nathalie Roy, MD Boston, MA, USA</i></p>	3:20-3:28 PM	<p>Prophylactic MCS in Cardiac Surgery: A New Weapon in Our Hands in Complex Procedures</p> <p><i>Scott Silvestry, MD Orlando, FL, USA</i></p>	3:20-3:25 PM	<p>Association between Disrupted Cerebral Autoregulation and Radiographic Neurologic Injury for Children on ECMO: A Pilot Study</p> <p><i>Ethan Sanford Dallas, TX, USA</i></p>
3:30-3:38 PM	<p>Tracheostomy: Timing & Technique</p> <p><i>Philippe Lemaitre, MD, PhD New York, NY, USA</i></p>	3:30-3:38 PM	<p>Mechanical Complications of MI: Timing of Repair</p> <p><i>Jonathan Haft, MD Ann Arbor, MI, USA</i></p>	3:25-3:30 PM	<p>Platelet Function in Pediatric ECMO Patients</p> <p><i>Colin Mowrer</i></p>
3:40-3:48 PM	<p>RV Failure in ARDS: When to Convert to VA or VPA</p> <p><i>Phillip Mason, MD San Antonio, TX, USA</i></p>	3:40-3:48 PM	<p>ECMO in Septic Shock? When is VA the Answer?</p> <p><i>Graeme MacLaren, MBBS, MSc, FELS Singapore</i></p>	3:30-3:35 PM	<p>Family Priorities in Pediatric ECMO Recovery: A Single Center Survey Study</p> <p><i>Elizabeth Herrup Pittsburgh, PA, USA</i></p>
				3:35-4:00 PM	<p>Improving Neurologic Outcomes After Respiratory Arrest Using a Porcine ECPR Model</p> <p><i>Alejandro Garcia Baltimore, MD, USA</i></p>
				4:00-4:05 PM	<p>Does an Educational Video Improve Parental Understanding of ECMO?</p> <p><i>Rachael Sundland Chicago, IL</i></p>

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3:50-3:58 PM	Cannulation Complications and Surgical Mishaps: What Can Happen & How to Avoid <i>Michael McMullan, MD</i> Seattle, WA, USA	3:50-3:58 PM	MCS as a Bridge to Transplantation: Lessons from New Allocation System <i>Amy Hackmann, MD</i> Dallas, TX, USA	4:05-4:10 PM	Automated pupillometry for the prediction of neurologic outcomes in children requiring ECMO <i>Nicolle Diaz</i> Dallas, TX, USA
4:00-4:20 PM	Panel Discussion	4:00-4:20 PM	Panel Discussion	4:10-4:20 PM	Panel Discussion
4:20-4:30 PM	Transition Time				
4:30-5:30 PM	Breakout 19, Salon A-E ECMO in Pandemics: Preparing for the Next One <i>Gail Annich, MD, FELS0</i> Toronto, Canada	4:30-5:30 PM	Breakout 20, Salon F Neurologic Injury During ECMO <i>Ravi Thiagarajan, MD, FELS0</i> Boston, MA, USA <i>Aparna Hoskote, MD</i> London, UK	4:30-5:30 PM	Breakout 21, Salon G-K Neonatal ECMO: Next Gen Approaches for the Next Gen - Expert Panel and Moderated Discussion <i>Natalie Rintoul, MD</i> Philadelphia, PA, USA <i>Javier Kattan, MD</i> Santiago, Chile
4:30-4:38 PM	Coordination of a National ECMO Infrastructure: Challenges and Lessons Learned <i>Rodrigo Diaz, MD, FELS0</i> Santiago, Chile	4:30-4:38 PM	Strategies for Early Recognition of Brain Injury in the ECMO Patient <i>Lakshmi Raman, MD</i> Dallas, TX, USA	4:30-4:38 PM	Update on the Venovenous Dual Lumen Cannula in Neonates <i>Brian Gray, MD</i> Indianapolis, IN, USA
4:40-4:48 PM	Why Don't We Coordinate ECMO Services Across Regions? <i>Vincent Pellegrino, MD</i> Melbourne, Australia	4:40-4:48 PM	Beyond Medical Management in Embolic CVA <i>Alfred See, MD</i> Boston, MA, USA	4:40-5:30 PM	Panel Discussion: Time to Change from Roller to Centrifugal Pumps? Contemporary Approaches to Anti-coagulation in the Neonate. <i>Robert Digeronimo, MD</i> Seattle, WA, USA <i>Francesca Miquel-Verges, MD</i> Little Rock, AR, USA <i>John Daniel, MD, MS</i> Kansas City, KS, USA
4:50-4:58 PM	ECMO Research in Pandemics: What We Need in Place <i>Ewan Goligher, MD, PhD</i> Toronto, Canada	4:50-4:58 PM	Neurologic Complications on Pediatric ECMO <i>Aparna Hoskote, MD</i> London, UK		
5:00-5:08 PM	Considerations in ECMO Access and Equity <i>Anna Condella, MD, MA</i> Seattle, WA, USA	5:00-5:08 PM	Rare but Devastating: Anterior Spinal Cord Stroke in VA ECMO <i>Simon Finney, MB, ChB, PhD</i> London, UK		<i>Carly Heyrend, PharmD</i> Salt Lake City, UT, USA
5:10-5:18 PM	ELSO's Role in Future Pandemics <i>Matthew Paden, MD</i> Atlanta, GA, USA	5:10-5:18 PM	Optimization of Cerebral Perfusion on ECMO after Cardiac Arrest <i>Thomas Mueller, MD, FELS0</i> Regensburg, Germany		<i>Nicholas Carr, DO</i> Salt Lake City, UT, USA
5:20-5:30 PM	Panel Discussion	5:20-5:30 PM	Panel Discussion		<i>Kathleen Ryan, MD</i> Stanford, CA, USA
6:00-7:00 PM	Evening Reception Exhibit Floor				
7:00-8:00 PM	Award Ceremony Award of Excellence, FELS0, Best Abstract Salon E-F-G				

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Day 3-Saturday September 17, 2022 (8 AM to 12 PM)

7:00-8:00 AM

Salon E	Directors' Meeting with Breakfast	Salon G	Coordinators' Meeting with Breakfast	Exhibit Hall	Breakfast - For All Other Attendees
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8:30-9:30 AM

Breakout 22, Salon A-E	Breakout 23, Salon F	Breakout 24, Salon G-K
ECMO for Lung Transplantation	ECMO, VAD, and Everything in Between: How Can Evidence Inform the Best MCS Strategy for Children with Heart Failure	ELSO Registry Session

Amy Hackmann, MD Dallas, TX, USA William Lynch, MD Ann Arbor, MI, USA	Peta Alexander, MBBS Boston, MA, USA Giles Peek, MD, FELLO Gainesville, FL, USA	Joseph Tonna, MD, MS Salt Lake City, UT, USA
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8:30-8:38 AM

A New Indication? Lung Transplant in the Post-COVID Patient	Decision-Making for Central vs Peripheral (and Upper vs Lower Body) VA-Cannulation	Updates to the SOC Data Request Process and Proposal Reviews
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Marcelo Cypel, MD, MSc Toronto, Canada	Francis Fynn-Thompson, MD Boston, MA, USA	Kollengode Ramanathan, MBBS, DNB Singapore Aparna Hoskote, MD London, UK Marc Anders, MD Houston, TX, USA
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8:40-8:48 AM

BTT Consults from Afar: Pre-Transplant Evaluation of Patients on ECMO	Patients with Cardiogenic Shock Should be Supported with VAD	Using the ELSO Registry for Research
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Anil Trindade, MD Nashville, TN, USA	Angela Lorts, MD, MBA Cincinnati, OH, USA	E. Willson Grandin, MD Boston, MA, USA Erika O'Neil, MD
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8:50-8:58 AM

Optimizing Physiologic Support for BTT: Why the RV Matters	The Case for Patients with Cardiogenic Shock Being Supported with ECMO	Industry use of the ELSO Registry to Support Device Approval and Surveillance
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Jasleen Kukreja, MD, MPH San Francisco, CA, USA	Graeme MacLaren, MBBS, MSc, FELLO Singapore	Phil Boonstra, PhD Ann Arbor, MI, USA
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9:00-9:08 AM

New Frontiers in ECLS for Donor Organ Preservation and Recovery	Patients with Cardiogenic Shock Need Impella (With or Without ECMO)	Using the Quality Dashboard in Clinical Practice
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Rei Ukita, PhD Nashville, TN, USA	Sebastian Tume, MD Houston, TX, USA	Elliott Cohen, MD Nashville, TN, USA
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9:10-9:30 AM

Panel Discussion	Panel Discussion	Panel Discussion
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9:30-9:40 AM

Transition Time

9:40-10:40 AM

Breakout 25, Salon A-E	Breakout 26, Salon F	Breakout 27, Salon G-K
A Breath of Fresh Air: Hot Topics in Pediatric Respiratory ECMO	Award of Excellence	Let's Get Moving: Physical Rehabilitation During ECMO

Thomas Brogan, MD, FELLO Seattle, WA, USA	Tracy Morrison, RN, FELLO Dayton, OH, USA	Craig Rackley, MD Durham, NC, USA Dana Mullin, CCP New York, NY, USA
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9:40-9:48 AM

ECMO in Bone Marrow / Stem Cell Transplant: Expert Consensus Review	The ELSO Award of Excellence: Blueprint for Building a Quality Centric Program	Physical Therapy in Critical Illness: Standard of Care in ECMO?
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Matteo Di Nardo, MD Rome, Italy	Cory Ellis, CCP, FELLO Aurora, CO, USA	Hussein Kanji, MD Vancouver, Canada
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9:50-9:58 AM

Airway and Tracheostomy Management in Pediatric ECMO	The ELSO Quality Reporting Platform: Arbormetrix and Excellence	Safety First: Developing a Rehabilitation Program for ECMO Patients
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Joseph Kohne, MD Ann Arbor, MI, USA	Harry Kallas, MD Fresno, CA, USA	Bernadette Elliott, RN, CEN San Antonio, TX, USA
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10:00-10:08 AM	PEACE Out: The Pediatric ECMO Anticoagulation Collaborative (PEACE) Consensus <i>Jennifer Muszynski, MD, MPH Columbus, OH, USA</i>	10:05-10:20 AM	Achieving Excellence: Designing Safe Staffing Strategies During a Surge <i>Vincent Pellegrino, MD Melbourne, Australia</i>	10:00-10:08 AM	The Next Hurdle: Mobilization During VA ECMO <i>Darryl Abrams, MD New York, NY, USA</i>
10:10-10:18 AM	What Comes Next: What We Know About Long-Term Outcomes in Pediatric ECMO <i>Laurance Lequier, MD Edmonton, Canada</i>			10:10-10:18 AM	Mobility in Pediatric ECLS Patients <i>Desiree Bonadonna, MPS, CCP Durham, NC, USA</i>
10:20-10:40 AM	Panel Discussion	10:20-10:40 AM	Panel Discussion	10:20-10:40 AM	Panel Discussion
10:40-10:50 AM	Transition Time				
10:50-11:50 AM	Closing Remarks, Salon A-E <i>Matthew Paden, MD Atlanta, GA, USA and Grame MacLaren, MBBS, MSc, FELS0 Singapore</i>				

Conference Highlights

Keynote Address

Derek Angus, MD, MPH
Chair, Department of Critical Care Medicine
Associate Vice Chancellor for Healthcare Innovation
University of Pittsburgh & UPMC



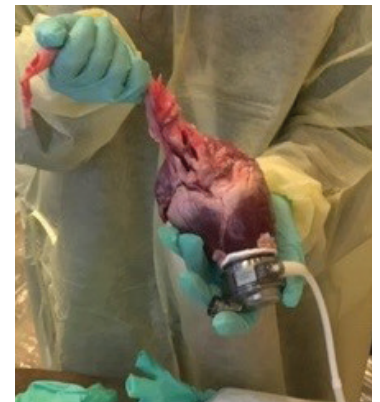
When:

Thursday, September 15th, 2022
1:00 PM EST
Salon A-K

Derek Angus oversees UPMC's clinical research, implementation science and data analytics, with a particular emphasis on UPMC's learning health system initiatives. He also is associate vice chancellor for Healthcare Innovation at the University of Pittsburgh Schools of the Health Sciences. He is a distinguished professor and holds the Mitchell P. Fink Endowed Chair in Critical Care Medicine at the University of Pittsburgh, with secondary appointments in Medicine, Health Policy and Management, and Clinical and Translational Science. Since 2008, Dr. Angus has served as chair of the Department of Critical Care Medicine. Since 2015, he also has been the physician director of the UPMC ICU Service Center, responsible for the provision of ICU services across the 30-plus hospital system. He also is a senior editor at JAMA.

Heart Lab

Join ELSO faculty in an immersive lab experience and discussion of heart anatomy and cardiac complications of ECMO cannulation. Learners will work in small groups to implant an LVAD cannula as part of this integrated learning opportunity. The Heart Lab is ideal for proceduralists and anyone wishing for a deeper understanding of heart anatomy, function & ECMO complications. There are four Heart Lab sessions, and each is limited to 50 learners. An additional fee applies. Please see the Registration Desk for additional information.



Plenary Sessions

1st Session: Thursday September 15, 2022
Science at the Cutting Edge: ECLS and Beyond
1:00 – 2:30 PM

Global experts in ECMO and ECLS technology present the latest trends in cardiovascular medicine, pediatric ECMO, and xenotransplantation. In this session, we are proud to feature legendary ECMOlogist and seminal figure in life support technology J. Donald Hill, MD, FELLO. This session is moderated by Susanna Price, MD and Navin Kapur, MD.

Highlights:

50th Anniversary of the First ECMO Case featuring J. Donald Hill, MD, FELLO
New Frontiers of ECLS in Cardiovascular Medicine, Roberto Lorusso, MD PhD FELLO
Pediatric ECMO Research and Trial Design , Peta Alexander, MBBS
Pushing Boundaries: Experience in Xenotransplantation, Bart Griffith, MD
Panel Discussion

Conference Highlights

Plenary Sessions

2nd Session: Friday September 16, 2022

Critical Care in the Media

8:15 – 9:30 AM

Leading experts discuss the influence of media and social media in COVID-19 and critical care medicine practice with leading physicians & journalists. Also presented are an update on ELSO's global work and a sneak preview of the recently released Sixth Edition of The Red Book. This session is moderated by Graeme MacLaren, MBBS, MSc, FELS0 and Cara Agerstrand, MD.

We are pleased to have Gideon Gil share the Journalist's Perspective in this session. Gideon is the Managing Editor at STAT, overseeing STAT's investigative journalism, special projects, and science coverage. He joined STAT at its founding in 2015. He previously was the Boston Globe's health and science editor for a decade, with a hand in three Pulitzer Prizes.

Session Title: Critical Care in the Media

The Influence of Media and Social Media on our Practices, Dan Brodie, MD FELS0

A Journalist's Perspective: What Healthcare Providers Need to Know, Gideon Gil, MS

Update from ELSO, Christine Stead, MHSA

Special Preview of The Red Book, 6th Edition, Graeme MacLaren, MBBS, MSc, FELS0

Sponsored Talks

Friday September 16: 12:30 – 1:15 PM

Sponsored Talk #1 Future Trends in ECLS and Post-Pandemic Transitions

Sponsored by Getinge

Salon A-E

Featured Speakers: Jason Bartos, MD (University of Minnesota, Minneapolis, MN, USA) and Christina Creel-Bulos (Emory Healthcare, Atlanta, GA, USA)

Sponsored Talk #2 ECPella™ Therapy: Optimal Timing & Management to Rest & Recover with Impella

Sponsored by Abiomed

Moderated by Dr. Sanjeev Aggarwal, Vice President - Global Clinical and Medical Affairs, Surgical Therapies, Abiomed, Inc.

Salon G-K

Talk Description: An increasing evidence and publications have noted the clinical benefits of LV-unloading with Impella 5.5® and Impella CP® in conjunction with VA ECMO configurations. With clinical benefit established, the MCS community is now discussing the optimal timing to introduce Impella, managing ECPella in the ICU, and how and when to wean ECMO with recovery in mind. Join this event to engage in the discussion with leading global physicians at the forefront of ECPella adoption and learn how they use ECPella at their institutions to advance patients to recovery or as a bridge to transplant.

During Friday's Lunch Break, please join our sponsors for a lunch and learn opportunity. These sponsored talks are not eligible for continuing education; however, they are excellent opportunities to connect with the very latest ECLS technology. Attendees will have time to get lunch from the buffet prior to these concurrent sessions.

Conference Highlights

Social Events

Throughout our time in Boston, ELSO has planned a variety of social events. Some are well-established favorites, as well as a few new opportunities to gather. We look forward to celebrating with you!

Thursday September 15, 2022

Poster Presentations (see next page for details)

5:30 – 7:00 PM

Exhibit Floor

Friday September 16, 2022

Breakfast Meet and Greet with the Steering Committee

7:00 – 8:00 AM

Exhibit Floor

Evening Reception

6:00 – 7:00 PM

Exhibit Floor

Awards Ceremony: FELSO, Award of Excellence, Best Abstract, Past Steering Committee & Board Members

7:00 – 8:00 PM

Salon E – F – G

Saturday September 17, 2022

Directors' Meeting with Breakfast

7:00 – 8:00 AM

Salon E

Coordinators' Meeting with Breakfast

7:00 – 8:00 AM

Salon G

Past Celebrations



Photos for #ELSO2022 Awards Recipients, including Award of Excellence, and Conference Highlights will be available after the conference.

Poster Presentations

Abstracts and Select Centers of Excellence

Congratulations to ELSO's abstract submitters and select Centers of Excellence. ELSO received ~300 abstracts for review this year; the most ever. Posters are available for viewing next to the Exhibit Hall on the 3rd Floor.

Please join us for a social event with cash bar on Thursday, September 15, from 5:30 - 7:00 PM.

Authors are looking forward to sharing their work with you!

Poster Board Location

Poster	Author/Name	Title
1	Ascension Seton Medical Center Austin	ELSO Center of Excellence Blue Ribbon Poster
2	ECMO Centrum Karolinska	ELSO Center of Excellence Blue Ribbon Poster
3	Advocate Children's Hospital Oak Lawn	ELSO Center of Excellence Blue Ribbon Poster
4	Memorial Regional Hospital	ELSO Center of Excellence Blue Ribbon Poster
5	Vancouver General Hospital	ELSO Center of Excellence Blue Ribbon Poster
6	Ashok Babu	Novel Technique for Off Pump Implantation of Ambulatory Central ECMO with Left Ventricular Unloading
7	Malgorzata Celinska-Spodar	Arterial hyperoxia and mortality in patients undergoing venoarterial extracorporeal membrane oxygenation.
8	Ignazio Condello	Micro Embolic Activity During Cavitation and type of Gas involved on ECMO and Minimal Invasive Extracorporeal Circulation.
9	Adam Dalia	Nighttime and Weekend Adult Venoarterial ECMO cannulation is not associated with Increased 1-year Mortality
10	Ben Deverett	Clinical trajectories of neurologic complications on ECMO
11	Hussam Elmelliti	Outcomes of patients with cardiac arrest on extracorporeal cardiopulmonary resuscitation: A Single Center Retrospective Study in the Middle East
12	Tony Espinoza	Utilization of Veno-Arterial Extracorporeal Membrane Oxygenation (VA ECMO) in the setting of beta-blocker, calcium channel blocker, and combined overdoses: A single-center case series
13	Tony Espinoza	Improved Survival with Use of Veno-Arterial Extracorporeal Membrane Oxygenation (VA ECMO) in Patients with Acute Pulmonary Embolism Presenting with Severe Cardiogenic Shock
14	Kay Everett	Left ventricular unloading reduces right ventricular preload and afterload in patients with acute decompensated heart failure and cardiogenic shock
15	Neil Harwani	ECMO Use and In-Hospital Mortality Among Patients in Cardiogenic Shock: Insights from the Cardiogenic Shock Working Group
16	Keri Hickman	Arterial cannula position monitoring by daily femoral head x-ray
17	Inseok Jeong	Hypoalbuminemia during extracorporeal membrane oxygenation support is associated with in-hospital mortality
18	Akhil Kallur	The Impact of Different Stages of Acute Kidney Injury on Mortality and Discharge Outcomes for Patients on Venarterial Extracorporeal Membranous Oxygenation
19	Andrew Kalra	Racial and Ethnical Disparity in Hypoxemia Detection in Patients Receiving ECMO
20	Andrew Kalra	Discrepancy in Pulse Oximetry (SpO2) and Arterial Gas Oxygen Saturation (SaO2) Levels in ECMO Cannulation Strategies
21	Jason Kalvelage	Retrospective Cohort Analysis of Platelet Inhibitor Therapy in Children and Adults Supported on Extracorporeal Membrane Oxygenation
22	Barkin Kültürsay	Impact of extracorporeal cardiopulmonary resuscitation on neurologic outcome in patients with acute coronary syndrome: Single centre experience
23	Ryan Ling	Extracorporeal cardiopulmonary resuscitation for cardiac arrest: a systematic review and meta-analysis
24	Ryan Ling	Extracorporeal membrane oxygenation for pulmonary embolism: A systematic review and meta-analysis
25	Ryan Ling	Immunomodulators in patients receiving extracorporeal membrane oxygenation for COVID-19: a propensity-score weighted analysis of the ELSO registry.
26	Kaitlyn Lingle	Location of Cardiac Arrest Does Not Correlate with Survival in Extracorporeal Cardiopulmonary Resuscitation
27	Kaitlyn Lingle	Initial Recorded Cardiac Rhythm Does Not Correlate with Survival in Extracorporeal Cardiopulmonary Resuscitation
28	Kaitlyn Lingle	Targeted Temperature Management Does Not Correlate with Neurological Outcome in Extracorporeal Cardiopulmonary Resuscitation
29	Kaitlyn Lingle	Awake Femoral Venarterial Extracorporeal Membrane Oxygenation is Safe and Reproducible
30	Terapia Pasantes	Outcomes in Extracorporeal Membrane Oxygenation (ECMO) single-center experience in Latin America.
31	Susanna Price	Long-term survival post-cardiogenic shock using acute mechanical circulatory support
32	Susanna Price	Improvement of patient outcomes through implementation of a comprehensive cardiogenic shock programme
33	Narmathan Rajeswaran	Life-threatening bradycardias in COVID-19 patients whilst supported on venous-venous ECMO
34	Aakash Shah	MANTA Decannulation for Femoral Veno-Arterial Extracorporeal Membrane Oxygenation Is Safe and Effective
35	Jorik Simons	Unilateral versus Bilateral Femoral Cannulation in Adult Peripheral Veno-Arterial Extracorporeal Membrane Oxygenation
36	Shahana Uddin	Post-cardiotomy: evolution of selection criteria for post-operative MCS

Poster Board Location

Poster	Author/Name	Title
37	Shahana Uddin	Potential benefit from intra-aortic balloon pump in cardiogenic shock: too soon to discard entirely?
38	Kristopher Urrea	The Effect of Nutrition Supplementation on Heart Performance During Normothermic Ex Vivo Heart Perfusion
39	Erica Bak	Breaking Boundaries: Going Home for a Compassionate Discontinuation of ECMO
40	Emory Buck	Outcomes Associated with Timing of Renal Failure in Adult Patients with Acute Respiratory Distress Syndrome Requiring Venovenous Extracorporeal Membrane Oxygenation
41	Nicole Cavaliere	The effect of renal dysfunction on mortality rates for patients on VV-ECMO for ARDS due to COVID-19 infection.
42	Sagar Dave	Outcomes in Adults Requiring Transport for Venovenous Extracorporeal Support – Does Distance from ECMO Center Matter?
43	Griffin Devine	Change in anticoagulation management to Anti-Xa monitoring during COVID-19 Pandemic to avoid ICH in VV ECMO patients
44	JK Garcia	Clinical Profile And Treatment Outcomes Of Patients With Leptospirosis And Acute Respiratory Failure Who Underwent Extracorporeal Membrane Oxygenation
45	Sydney Hansen	ECMO Survivorship: Comparing V-V and V-A Timing of Return to Home and Work
46	Thomas Jasny	Results from 242 ECMO runs in drowned patients. A nationwide retrospective study.
47	Hason Khan	ECMO in Patients with Unexplained ARDS- Case Definition and Recommendations for Trimethoprim Sulfamethoxazole ARDS
48	Neil Kumar	ECMO Duration for COVID-19 Patients – Does it Matter?
49	Anthony Lubinsky	Association of Ventilator Settings and Lung Mechanics During VV-ECMO Treatment with Short Term Pulmonary Function and Lung Imaging Outcomes in COVID-19 Survivors; a Retrospective Cohort Study
50	Alexandra May	Predictors of Mortality in Acute Respiratory Failure Patients Treated with Extracorporeal CO2 Removal
51	Valentina Obreja	Process and Outcomes of Prone Position Therapy (PPT) for Extracorporeal Membrane Oxygenation (ECMO) Patients with COVID-19
52	Valentina Obreja	Advanced Nurse Training Program for Extracorporeal Membrane Oxygenation (ANTP4ECMO): What's the evidence?
53	Shinichiro Ohshimo	Impact of high/low-volume hospitals of ECMO before the COVID-19 pandemic era on ECMO outcomes in patients with fatal COVID-19
54	Christopher O'Neil	Quantifying Ventilator Rest During ECMO Support Using Mechanical Power
55	Hannah Rando	Extracorporeal Membrane Oxygenation as a Bridge to Lung Transplantation: Patient Outcomes by Underlying Diagnosis
56	Omar Saeed	Lactate Dehydrogenase is Associated with Hemorrhagic Stroke During Extracorporeal Membrane Oxygenation for COVID-19
57	Lara Schaheen	In it for the long run! Long-Term ECMO as a Bridge to Recovery in Severe COVID-19 ARDS
58	Joerg Scheier	Early initiation of hemoadsorption reduces the need for organ support in critically ill COVID-19 patients on ECMO: A post-hoc analysis from the CytoSorb Therapy in COVID-19 (CTC) Registry
59	Joseph Tonna	An international cohort study to determine predictors of early mobilization in patients requiring ECMO for greater than 7 days
60	Christopher Wilcox	Comparison of Energy Expenditure Calculations to ASPEN Nutritional Recommendations
61	Christopher Wilcox	Alternative Methods for Measuring Energy Expenditure in Patients Supported with ECMO
62	Asma Zainab	Prolonged ECMO Therapy Outcomes: What's Next?
63	Ece altınay	A possible conduit between patients' circulation and ECMO water heater devices
64	Dominick Carella	Oxygenator Impact on Remdesivir in Extracorporeal Membrane Oxygenation Circuits
65	Hwa Jin Cho	Effect of mesenchymal stem cell media on cellular metabolism in experimental ECMO model
66	Michael Gaber	Excellence in ECMO Outcomes: Getting Back to Basics
67	Swosti Joshi	The role of the Extracorporeal Membrane Oxygenation circuit in inducing inflammation Ex vivo
68	Andrea Meli	Agreement between VCM and TEG 5000 viscoelastic analyzers: a multicenter study.
69	Bree Ann Young	Allosteric modification of hemoglobin to improve anemia tolerance in a porcine model of veno-arterial extracorporeal membrane oxygenation
70	Marta Velia Antonini	"Recruiting" membrane lung: rationale, report, & related risks
71	Marta Velia Antonini	EISOR after failed extracorporeal cardio-pulmonary resuscitation: how to preserve cannulae & circuit when prolonged no-touch time expected?
72	Heather Brady	In Patients that Weigh 7 kgs or Less, Using an Adult Oxygenator with a High Flow Shunt Reduces Circuit Component Changeouts Due to Hemolysis Compared to Using a Pediatric Oxygenator with No Shunt.
73	Brandon D'Aloiso	Clinical evaluation and comparison of three polymethylpentene (PMP) oxygenators used for extracorporeal membrane oxygenation

Poster Board Location

Poster	Author/Name	Title
74	Harry Kallas	Distributed Blood And Patient Warming During Pediatric Extracorporeal Life Support (ECLS) Is Associated With Decreased Rates of Severe Hemolysis (SH)
75	Tiffany Kiser	Validation and Comparative Analysis of Integrated Pressure Monitoring to Traditional Methods in an ECMO Circuit
76	Nikolai Krivitski	New Method of Continuous Noninvasive Monitoring of Cardiac Recovery During VA ECMO*
77	Saba Lahar	The utilization of a secondary oxygenator in a single ECMO circuit for the treatment of refractory hypoxemia
78	Ewa Trejnowska	"An Organic Membrane Material with Pore-Forming, Anti-Inflammatory, and Anticoagulant Properties and The Method of Obtaining It"
79	Ewa Trejnowska	"A New Approach to Oxygenator Construction in Extracorporeal Membrane Oxygenation"
80	Akif Undar	The Extracorporeal Life Support Organization (ELSO) Registry Analysis for Centrifugal vs. Roller Blood Pumps on Mortality and Morbidity Rates in 612 Neonatal Venovenous Extracorporeal Membrane Oxygenation (VV-ECMO) Patients
81	Cindy Urbas	Single center experience with Use of Bivalirudin versus Unfractionated Heparin in CRRT and ECMO
82	Anthony di Natale	Congenital Lung Lesions Requiring ECMO: A Single-Center Experience
83	Robert DiGeronimo	Current Experience with the Use of Bivalirudin for ECMO within the Children's Hospital Neonatal Consortium
84	Lindsay Gil	Systematic Review of Clinical Outcomes after Carotid Artery Ligation versus Carotid Artery Reconstruction following VA-ECMO in Infants and Children
85	Sarah Handley	Single center experience using bivalirudin as primary anticoagulation for ECMO in neonates with respiratory failure.
86	Morcos Hanna	Ductal Shunting in Neonates with CDH: Does the Direction of Flow Predict Clinical Outcomes?
87	Srirupa Hari Gopal	Factor XIII levels in Neonates on Extracorporeal Membrane Oxygenation (ECMO)
88	Martha McBride	ECMO Team Implements an Innovative Equipment Upgrade
89	Martha McBride	Evaluation of neonates with end stage renal disease supported with extracorporeal membrane oxygenation
90	Vilmaris Quinones	Use of phenobarbital as a strategy to reduce opioid and benzodiazepine use in neonatal extracorporeal membrane oxygenation
91	Neysan Rafat	Impact of Time Point of Extracorporeal Membrane Oxygenation on Mortality and Morbidity in Congenital Diaphragmatic Hernia: A Single-Center Case Series
92	Kevin Smith	Comparison of Venovenous and Venoarterial ECMO Outcomes in Neonates with Respiratory Failure
93	Rachael Sundland	Does an Educational Video Improve Parental Understanding of ECMO?
94	Rong Xiao	Single-center retrospective analysis of convulsive events during neonatal extracorporeal membrane oxygenation therapy
95	Peta Alexander	Change in pSOFA Score as a Novel Outcome for Pediatric ECMO Research
96	Asaad Beshish	Short-Term Outcomes and Risk Factors for Requiring Extracorporeal Life Support After Norwood Operation: A Single Center Retrospective Study
97	Asaad Beshish	Hyperoxia While on Extracorporeal Life Support is Associated with Mortality in Neonates Following Norwood Operation
98	Stephanie Brown	Outcomes after Extracorporeal Cardiopulmonary Resuscitation for Pediatric In-Hospital Arrest
99	Stephanie Brown	Outcomes After Respiratory Extracorporeal Life Support in Adolescents and Young Adults
100	Tania Gennell	Outcomes of Pre-Operative Peripheral ECMO in Infants with Heart Disease
101	Hannah Giunta	A New Frontier: Withdrawal of ECMO Support in Awake Pediatric Patients
102	Justin Huang	Organ Dysfunction Recovery in Pediatric ECMO Patients
103	Mandee Lines	Percent Time in Therapeutic Range for Bivalirudin versus Heparin in Pediatric Extracorporeal Membrane Oxygenation (ECMO)
104	Kristen Nelson McMillan	Comparison of Direct Thrombin Inhibitors Versus Unfractionated Heparin for Systemic Anticoagulation During Pediatric Extracorporeal Membrane Oxygenation
105	David Palmer	A high-fidelity Animal Block Model used to Simulate Central Extracorporeal Membrane Oxygenation Cannulation
106	Anjali Sadhwani	Long-term Neurodevelopmental Outcomes for Survivors of Cardiac ECMO in Childhood: A Single Center Prospective Study
107	Janet Simsic	Improved ECMO Survival with Anticoagulation Guideline Implementation
108	Francesca Sperotto	Performance of the Pedi-SAVE score in pediatric patients supported with ECMO for failing to wean from cardiopulmonary bypass after cardiac surgery
109	Jan Stevens	Effect of Age on Anticoagulation Therapy during the First 24 Hours of Pediatric Extra Corporeal Membrane Oxygenation

Poster Board Location

Poster	Author/Name	Title
110	Suzie Sweden	Review of cardiac catheterization practice in paediatric patients supported by Extracorporeal Membrane Oxygenation: institution experience in Royal Brompton Hospital over 10 years (2013-2022)
111	McKenzie Young	Outcomes of a vial-sparing antithrombin III protocol in pediatric extracorporeal membrane oxygenation
112	Pilar Anton-Martin	Early RRT initiation during pediatric ECMO support is associated with increased survival
113	Jessica Barreto	Outcomes and complications of single site double-lumen cannulation vs multisite single-lumen cannulation for venovenous (VV) ECMO in pediatric patients: an analysis of the ELSO registry
114	Joseph Clark	Central versus peripheral cannulation for extracorporeal life support in children without congenital heart disease
115	Brian Gray	Early Use Experience of the Novel Crescent RA Neonatal VV-ECMO Cannula Among CHNC ECMO Focus Group Members
116	Peggy Han	Progressive mobility in a pediatric patient with prolonged veno-veno extracorporeal membrane oxygenation while awaiting lung transplantation
117	Amy Howk	Short-term outcomes of pediatric patients that require thoracotomy during extracorporeal life support: a retrospective database review
118	Erika Pineda	Outcome Comparison of Inhaled Anesthetics Versus ECMO In Children with Near-Fatal Asthma
119	Jason Robertson	Use of image guidance during pediatric venovenous ECMO cannulation: A survey of the American Pediatric Surgical Association (APSA)
120	Tess Suttles	INSensible Oxygenator Fluid LOSS (INOFLO): In Vivo Measurement of Insensible Fluid Loss on ECMO.
121	Brian Asermily	Don't Wait, Cannulate: Utilizing a Custom Cannulation Cart to Expedite ECMO Implantation for ECPR Anywhere in the Medical Center
122	Lynne Benish	Rapid Expansion of VV-ECMO Support during the COVID-19 Pandemic: Experiences from a Community Hospital
123	Sofia Cheliout Da Silva	DRIVE-ing ARDS medical countermeasure innovations for simpler, safer, more widely accessible ECMO and alternative approaches to gas exchange.
124	Monika Collins	Navigating the Land Mines of Prone Pediatric ECMO Patients
125	Monika Collins	ECMO for Adult ARDS: Developing a Formal Stratification Process for External Referrals
126	Holly Fogle	Chasing Numbers: Changing the Anticoagulation Paradigm
127	Blake Frazier	At the Touch of a Button: Creating Real-Time ECMO Specialist Education and Training
128	Benjamin Friedrichson	A web-based dashboard to visualise regional allocation and prediction of supply and demand of ECMO treatments in Germany
129	Tammy Marshall	A Unique Approach for Pressure Injury Reduction in ECMO Patients
130	Enrico Squicciarro	Addressing inadequate blood flow during normothermic regional perfusion for in-situ DCD grafts preservation
131	Jamie Stebler	Cannulate, Extubate, Ambulate: Effect of a Mobility-Focused Program on Outcomes of COVID+ ECMO Patients at West Virginia University Medicine
132	Steven Zaborowski	Fostering Family-centered Care through Use of ICU Diaries
133	David Zhao	Challenges in Brain Death Determination in Extracorporeal Membrane Oxygenation – A Single Center Experience
134	Beth Heather	Implementation of an ECMO Retrieval Process Utilizing Nurse Specialists at a Medium-Volume Adult ECMO Center
135	Alex Manuel	Development of an Inter-hospital transfer network for patients requiring extracorporeal membrane oxygenation during the COVID-19 Pandemic

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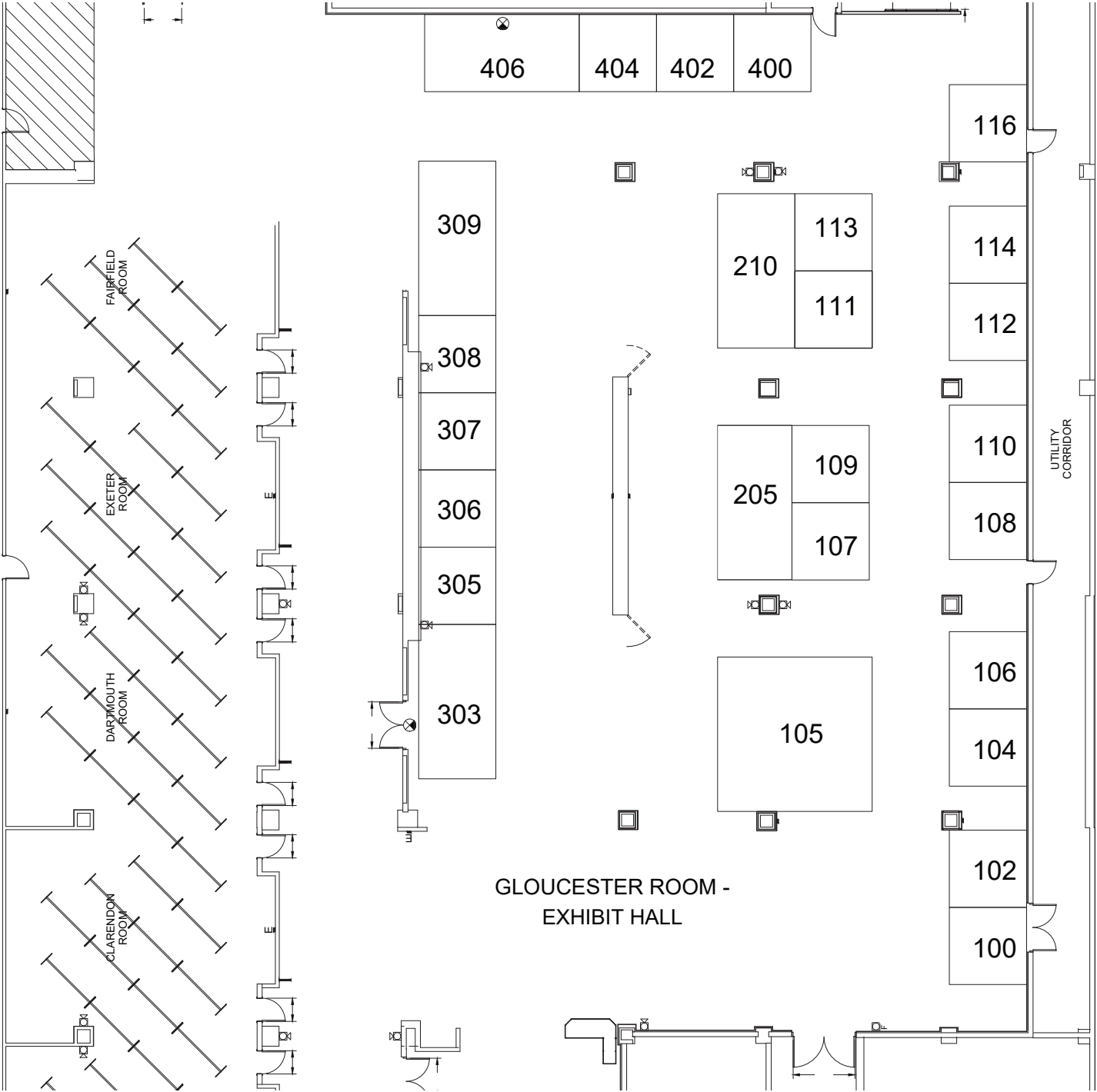


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Exhibitor Hall Map

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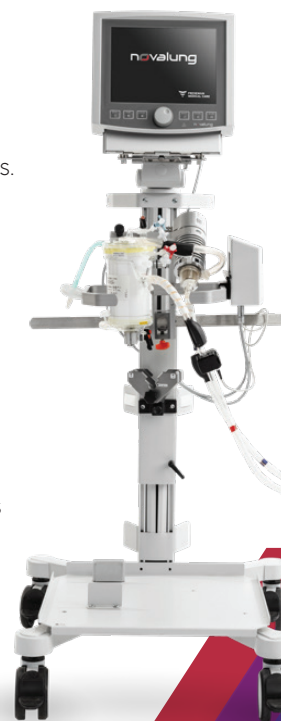
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References:

1. Shin, TG et al, "Extracorporeal Cardiopulmonary Resuscitation in Patients with Inhospital Cardiac Arrest: A Comparison with Conventional Cardiopulmonary Resuscitation." Crit Care Med 39, no. 1 (January 2011): 1-7.

INDICATIONS FOR USE

The Novalung System is indicated for long-term (>6 hours) respiratory/cardiopulmonary support that provides assisted extracorporeal circulation and physiologic gas exchange (oxygenation and CO₂ removal) of the patient's blood in adults with acute respiratory failure or acute cardiopulmonary failure, where other available treatment options have failed, and continued clinical deterioration is expected or the risk of death is imminent. These may include:

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1. Kapur NK, Whitehead EH, Thayer KL and Pahuja M. The science of safety: complications associated with the use of mechanical circulatory support in cardiogenic shock and best practices to maximize safety [version 1; peer review: 2 approved] F1000Research 2020, 9(Faculty Rev):794 <https://doi.org/10.12688/f1000research.25518.1>

2. Amin AP, Spertus JA, Curtis JP, et al. The evolving landscape of Impella use in the United States among patients undergoing percutaneous coronary intervention with mechanical circulatory support. *Circulation*. 2020 Jan 28;141(4):273-284.



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In support of improving patient care, this activity has been planned and implemented by Amedco LLC and Extracorporeal Life Support Organization. Amedco LLC 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.

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Notes

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Notes

A Statement About Health & Safety:

ELSO endeavors to conduct this conference in a manner that protects the health and safety of all participants. At the time of this program printing, mandates were not active locally (Boston, Massachusetts). We recognize that we are in a quickly-changing health environment. ELSO will comply with local rules in effect at the time of this event. Masks are available at Registration for those interested. Please use good judgment in participating in this, and affiliated, events.

Thank You!

*For your hard work
to heal the world's sickest patients
during this pandemic.*



**SAVE
THE
DATE**

*34th ELSO Conference
September 28, 2023 - October 1, 2023*

*Hyatt Regency Seattle
Seattle, WA*

