



## ELSO 31th Annual Conference

September 25-26, 2020

31th Annual ELSO Conference - Improving ECLS Outcomes

All times are in Central Time (UTC -5) Time convertor: <https://www.timeanddate.com/worldclock/convert.html>

Friday, September 25, 2020		
9:00 - 9:05	Welcome	Kasia Hryniewicz, MD
9:05 - 9:30	<b>Keynote Address</b>	John Fraser, MD
	<b>Plenary Session</b>	
9:30 - 9:45	ELSO in times of pandemic	Mark Ogino, MD
9:45 - 10:00	What's coming in ECCO2R for COPD clinical trials?	Daniel Brodie, MD
10:00 - 10:15	What's coming in ECCO2R for ARDS clinical trials?	Eddy Fan, MD
10:15 - 10:30	Are kids (on ECMO) just little adults?	Peta Alexander, MD
10:30 - 10:45	ECPR - A single center experience	Jan Belohlavek, MD
10:45 - 11:00	Pumpless ECMO	Emily Partridge, MD
<b>11:00 - 11:30</b>	<b>Exhibitors/Poster/Labs/Sponsored Talks</b>	
11:00 - 11:30	Heart lab	Karol Mudy, MD
11:00 - 11:30	Lung lab	Robert Bartlett, MD
11:00 - 11:30	Poster presentations	
11:00 - 11:30	Sponsored talk brought to you by Medtronic: Integrating new ECMO products into practice during COVID 19 and the importance of product design	Nick Mellas, CCP, Scott Merz, Ph.D
<b>11:30 - 12:45</b>	<b>Breakout 1: Cardiac ECMO in Neonates and Children</b>	Moderators: Shri Deshpande, MD, Mark Ogino, MD
11:30 - 11:45	Circulation challenges - they are not all made the same	Joanne Starr, MD
11:45 - 12:00	The challenge of ECMO after hemi - Fontan / bidirectional Glenn	Christopher Mascio, MD
12:00 - 12:15	Rescuing a complex cardiac patient	Michael McMullan, MD
12:15 - 12:30	Post cardiectomy hemorrhagic shock in a patient supported with ECMO	Giles Peek, MD
12:30 - 12:45	Discussion and questions	
<b>11:30 - 12:45</b>	<b>Breakout 2: Pulmonary Adult</b>	Moderator: Cara Agerstrand MD
11:30 - 11:45	Protecting the lung - ventilator optimization during VV ECMO	Steven Conrad, MD PhD
11:45 - 12:00	The circuit - patient interface: effects of ECMO on pulmonary circulation and gas exchange	Juan Ronco, MD
12:00 - 12:15	Refractory hypoxia - a practical approach	Hussein Kanji, MD
12:15 - 12:30	New coronavirus: approach to ECMO care in China	Xiaotong Hou, MD
12:30 - 12:45	Discussion and questions	
<b>11:30 - 12:45</b>	<b>Breakout 3: Imaging on ECMO - Indications, Challenges and Pitfalls</b>	Moderator: Gail Annich, MD
11:30 - 11:45	POCUS in neonates	Carl Davis, MD
11:45 - 12:00	Different imaging modalities in pediatric ECMO - what do we need to know?	Sujatha Buddhé, MD
12:00 - 12:15	Vascular imaging in the adult ECMO patient	Jessica Titus, MD
12:15 - 12:30	Lung assessment on ECMO - what is available?	Michael Baram, MD
12:30 - 12:45	Discussion and questions	
<b>11:30 - 12:45</b>	<b>Breakout 4: COVID-19</b>	Moderator: Bishoy Zakhary, MD
11:30 - 11:40	COVID-19 - related ARDS: is it not really ARDS?	Daniel Brodie, MD
11:40 - 11:50	Cardiac manifestation of COVID-19 infection and the use of ECMO - rare but scary	Susanna Price, MD
11:50 - 12:00	Regional approach to ECMO care in times of pandemic	Christian Bermudez, MD
12:00 - 12:10	It's not just one, it's two to be saved - ECMO in a pregnant COVID-19 patient	Dena Goffman, MD
12:10 - 12:20	Multisystem Inflammatory Syndrome in children with COVID-19 infection - role of ECMO	Matteo Di Nardo, MD
12:20 - 12:45	Discussion and questions	

<b>12:45 - 1:00</b>	<b>Exhibitors/Poster Session</b>	
<b>1:00 - 2:30</b>	<b>Breakout 1: ECMO in the Adult Cath Lab - Beyond Cannulation</b>	Moderator: Christian Bermudez, MD
1:00 - 1:15	What's new in cardiogenic shock in adults	Kasia Hryniewicz, MD
1:15 - 1:30	Impella for all patients on VA ECMO? Rationale and evidence	Ivan Chavez, MD
1:30 - 1:45	Are the two ventricles playing together? New concept of LV unloading on peripheral ECMO	Roberto Lorusso, MD
1:45 - 2:00	Shock team	Joyce Wald, MD
2:00 - 2:15	It's not all that easy - common immediate complications, how to recognize, prevent and bail	Yale Wang, MD
2:15 - 2:30	Discussion and questions	
<b>1:00 - 2:30</b>	<b>Breakout 2: Congenital Diaphragmatic Hernia Round Table</b>	Moderator: Natalie Rintoul, MD
1:00 - 1:15	What's new in CDH: ELSO Numbers	Yigit Guner, MD
1:15 - 1:30	Whats new in CDH: SVC Stenosis in CDH	David Kays, MD
1:30 - 1:40	Decannulation readiness - view 1	David Kays, MD
1:40 - 1:50	Decannulation readiness - view 2	Jason Gien, MD
1:50 - 2:05	Pulmonary hypertension in CDH	Natalie Rintoul, MD
2:05 - 2:20	Repair on ECMO - anticoagulation, patch repair, how much to dissect, chest tubes or not	Brian Gray, MD
2:20 - 2:30	Discussion and questions	
<b>1:00 - 2:30</b>	<b>Breakout 3: Improving Outcomes in Pediatric ECMO</b>	Moderator: Matthew Paden MD, Ravi Thiagarajan, MD
1:00 - 1:15	ECLS for EVALI: A hidden Juul or just blowing smoke?	Matthew Harting, MD
1:15 - 1:30	Ins and Outs of pediatric ECPR - what is really needed?	Kirk Kanter, MD
1:30 - 1:45	Additive therapies on ECMO - dialysis, procedures and more	Rachel Sirignano, MD
1:45 - 2:00	Multiple ECMO runs - how many is too many?	Shri Deshpande, MD
2:00 - 2:15	Managing consent, parent expectations and perception	David Steinhorn, MD
2:15 - 2:30	Discussion and questions	
<b>1:00 - 2:30</b>	<b>Breakout 4: COVID-19 in Adults - Perspectives on ECMO Initiation and Management</b>	Moderator: Daniel Brodie, MD
1:00 - 1:15	United States	Erik Osborn, MD
1:15 - 1:30	France	Alain Combes, MD
1:30 - 1:45	South Korea	Jae-Seung Jung, MD
1:45 - 2:00	Chile	Rodrigo Diaz, MD
2:00 - 2:15	ECMO in the times of crisis - how to adapt ECMO processes and patient management	Cara Agerstrand, MD
2:15 - 2:30	Discussion and questions	
<b>2:30 - 3:00</b>	<b>Exhibitors/Posters/Labs/Sponsored Talks/Research Grant Presentations</b>	
2:30 - 3:00	Cannulation lab	Ivan Chavez, MD
2:30 - 3:00	Virtual tour of the artificial placenta lab	George Mychaliska, MD
2:30 - 3:00	Research grant presentations The PROTECMO study: research team description, preliminary data, and plan for analysis Analysis of Platelet Function in Patients on Extracorporeal Membrane Oxygenation Therapy The effects of chlorhexidine disinfection on infection in patients supported with ECMO Pediatric ECMO Anticoagulation Collaborative (PEACE) Anticoagulation in ECMO: Is there a better option? Discussion and questions for ELSO research grant presentations	Moderator: Lakshmi Raman MD, Ravi Thiagarajan MD Gennaro Martucci, MD Johannes Herrmann, MD Hye Ju Yeo, MD, PhD Peta Alexander, MD Jamie Weller, MD
2:30 - 3:00	Sponsored talk brought to you by Abbott: Optimal initiation of ECMO: Is Earlier Better for Outcomes?	Lucian Durham, MD Moderator: Robert L Kormos, MD
2:30 - 3:00	Sponsored talk brought to you by CytoSorbents: Cytokine absorption by CytoSorb in critically ill COVID-19 patients	Moderator: Efthymios "Makis" Deliargyris, MD Nader Moazami, Prof Michael Firstenberg, MD Alexander Supady, MD
<b>3:00 - 4:15</b>	<b>Plenary Session</b>	
	<b>Quality and Outcomes</b>	Moderator: Ryan Barbaro, MD
3:00 - 3:15	Understanding the barriers to providing quality ECMO care	Carol Hodgson PT, PhD
3:15 - 3:30	Bridging quality and research databases and enhancing international linkages	Eddy Fan, MD
3:30 - 3:45	What quality metrics and data should we be collecting to challenge the status quo?	Carol Hodgson PT, PhD
3:45 - 4:00	What can ELSO do for you? Using the ELSO Registry to improve local practice	Ryan Barbaro, MD
4:00 - 4:15	Discussion and questions	
<b>4:15 - 5:30</b>	<b>Breakout 1: Not so Common Indications for ECMO in Adults</b>	Moderators: Robert Bartlett, MD, Bishoy Zakhary MD
4:15 - 4:30	ECMO in burn patients	Phil Mason, MD
4:30 - 4:45	ECMO in hypothermia	Derek Gunning, MD
4:45 - 5:00	ECMO in patients with Type A Aortic Dissection	Karol Mudy, MD
5:00 - 5:15	ECMO in non-transplant surgery	Cara Agerstrand, MD
5:15 - 5:30	Discussion and questions	
<b>4:15 - 5:30</b>	<b>Breakout 2: Not so Common Indications for ECMO in Children and Neonates</b>	Moderator: Shri Deshpande, MD, Gail Annich, MD

4:15 - 4:30	Next frontier in anti-viral therapy: viral specific T cell	Ranjit Chima, MD
4:30 - 4:45	Pulmonary hypoplasia from renal disease - what is the real survival?	Eugenia Pallotto, MD MSCE
4:45 - 5:00	ECMO and active cancer - absolute contraindication or not?	Todd Kilbaugh, MD
5:00 - 5:15	Pulmonary hemorrhage syndrome - when to think about ECMO	Matthew Paden, MD
5:15 - 5:30	Discussion and questions	
<b>4:15 - 5:30</b>	<b>Breakout 3: All About the Circuit</b>	Moderator: Kelly Tointon CCP
4:15 - 4:30	Update on available PMP oxygenators	Ryan Kleinman, CCP
4:30 - 4:45	Centrifugal pumps for all or not?	Clinton Jones, CCP
4:45 - 5:00	To fogarty or not to fogarty - "clamped" arterial cannula clot removal technique	Kevin Charette, CCP
5:00 - 5:15	The slow decannulation: how to safely leave cannulas in place after removing the circuit	Azadeh Jahadi, CCP
5:15 - 5:30	Discussion and questions	
<b>4:15 - 5:30</b>	<b>Breakout 4: LATAM ELSO Session (Presented in Spanish)</b>	Moderator: Leonardo Salazar, MD
4:15 - 4 :25	Coordinacion nacional de centros de ECMO en COVID-19, expeiriencia en Chile	Rodrigo Diaz, MD
4:25 - 4:35	ECMO en sepsis pediatrica	Grace van Leeuwen, MD FSCAI
4:35 - 4:45	Anticoagulacion en ECMO COVID-19	Rene Gomez, MD
4:45 - 4:55	ECMO en cardiopatas congenitas	Luis Caneo, MD
4:55 - 5:05	ECMO VA vs Asistencia Ventricular temporal en choque cardiogenico	Leonardo Salazar, MD
5:05 - 5:15	Una vuelta en la montana rusa de COVID-19- 59 dias en ECMO	Ramiro Saavedra, MD
5:20 - 5:30	Discussion and questions	
<b>5:30 - 5:45</b>	<b>Exhibitors/Poster Session</b>	
<b>5:45 - 7:00</b>	<b>Breakout 1 - The Other Ventricle</b>	Moderator: Roberto Lorusso, MD
5:45 - 6:00	Clinical right ventricular failure - what do we really know about it?	Michael Samara, MD
6:00 - 6:15	Mechanical support for RV failure - what are the options?	Christian Bermudez MD
6:15 - 6:30	PERT - should ECMO be part of the equation	Phillip Green, MD
6:30 - 6:45	Struggling RV - how to accurately assess VA ECMO weaning	Bishoy Zakhary, MD
6:45 - 7:00	Discussion and questions	
<b>5:45 - 7:00</b>	<b>Breakout 2 - Patient Management</b>	Moderator: Christine Franciscovich, NP
5:45 - 6:00	Teenagers on ECMO - what should we think about?	Thomas Brogan, MD
6:00 - 6:15	Painful part of managing pain	Melissa Jones, NP
6:15 - 6:30	Early mobilization on ECMO - how to be successful	Carol Hodgson, PT, PhD
6:30 - 6:45	Taking care of a burn patient - what are the challenges?	Colleen Mitchell, RN
6:45 - 7:00	Discussion and questions	
<b>5:45 - 7:00</b>	<b>Breakout 3: Ask the experts - Peds and Neonate</b>	Joanne Starr, MD, Natalie Rintoul, MD, Gail Annich, MD, Justin Sleasman, CCP, Heidi Dalton, MD
<b>Saturday, September 26, 2020</b>		
<b>8:00-9:00</b>	<b>Late Breaking Report from The Lancet: The ELSO Registry on ECMO for COVID-19</b>	Moderator: Arthur S. Slutsky, MD Ryan Barbaro, MD, Daniel Brodie, MD, Graeme MacLaren, MD, Alain Combes, MD, Robert Bartlett, MD, Roberto Lorusso, MD, Phil Boonstra, PhD
9:00 - 12:00	<b>Plenary Session - ECMO Economics and The Great Debates</b>	Moderators: Matthew Paden, MD
9:00 - 9:20	Whistling past the graveyard - physicians, advanced technologies, and financing healthcare	Gordon Morewood, MD
9:20 - 9:30	Discussion and questions	
	<b>The Great Debates</b>	
9:30 - 9:55	ECPR should be offered to all children for out of hospital cardiac arrest	Kevin Maher, MD vs Giles Peek, MD
9:55 - 10:20	ECMO rather than Berlin Heart should be used as bridge to heart transplantation in neonates and young infants	Michael McMullan, MD vs Katsuhide Maeda, MD
10:20 - 10:45	Hypoxemia on VV ECMO - hi flow VV vs medical therapy	Darryl Abrams, MD vs Bishoy Zakhary, MD
10:45 - 11:10	Drugs and blood products should never be administered to the ECMO circuit	Cory Alwardt, CCP, PhD vs Tim Maul, CCP, PhD
11:10 - 11:35	Distal perfusion catheter should be placed in all adult VA ECMO patients	Jonathan Haft, MD vs Peter Eckman, MD
11:35 - 12:00	Discussion and questions	
<b>12:00 - 12: 45</b>	<b>Award Ceremony, Exhibitors, Sponsored Talks, Labs and Poster Presentations</b>	
12:00 - 12:45	Award Ceremony - FELSO/Centers of Excellence	Giles Peek, MD, Micheal Heard, RN, Tracy Morrison, RN, Barb Haney, RN
12:00 - 12:45	Hemodynamics lab	Daniel Burkhoff, MD
12:00 - 12:45	Poster presentations	
12:00 - 12:30	Sponsored talk brought to you by Abiomed: LV Unloading during ECMO	Christian Bermudez, MD
12:00 - 12:30	Sponsored talk brought to you by Getinge: The Complexities of COVID-19: Management Lessons from Unusual Cases	Erik Osborn, MD

<b>12:45 - 2:00</b>	<b>Breakout 1: Mechanical Circulatory Support in Organ Transplantation</b>	Moderators: Karol Mudy, MD, Mike McMullan, MD
12:45 - 1:00	Pediatric MCS - square peg in a round hole	Katsuhide Maeda, MD
1:00 - 1:15	ECMO as bridge to lung transplantation - which modality and when to think about VA	Christian Bermudez, MD
1:15 - 1:30	ECMO in heart and lung transplantation - single center experience	Yasuhiro Shudo, MD
1:30 - 1:45	ECMO in heart transplantation in adults - when to think about it?	Jaime Moriguchi, MD
1:45 - 2:00	Discussion and questions	
<b>12:45 - 2:00</b>	<b>Breakout 2: Neonatology</b>	Moderator: Mark Ogino, MD
12:45 - 1:00	ECMO and prematurity, how young is too young?	Natalie Rintoul, MD
1:00 - 1:15	Hemolysis during neonatal ECMO - do we need to worry?	Peta Alexander, MD
1:15 - 1:30	Routine use of EEG/US monitoring in neonates on ECMO - what is the evidence	Robert DiGeronimo, MD
1:30 - 1:45	Renal replacement therapies in neonates - to do or not to do?	Rachel Chapman, MD
1:45 - 2:00	Discussion and questions	
<b>12:45 - 2:00</b>	<b>Breakout 3: How to Thin the Blood - Sharing the Experience</b>	Moderators: Steven Conrad, MD PhD, Gail Annich, MD
12:45 - 1:00	Anticoagulant selection and monitoring in ECMO: chaos brings opportunity	Matthew Lillyblad, PharmD
1:00 - 1:15	Heparin and aPTT - how do we do it and why?	Laurance Lequier, MD
1:15 - 1:30	Heparin and heparin levels - how do we do it and why?	Bishoy Zakhary, MD
1:30 - 1:45	Bivalirudin is the way to go!	Lakshmi Raman, MD
1:45 - 2:00	Discussion and questions	
<b>12:45 - 2:00</b>	<b>Breakout 4: Simulations Dissected</b>	Moderator: Bhavesh Patel, MD
12:45 - 12:55	Why do we even do it? How often? What kind works best?	Bhavesh Patel, MD
12:55 - 1:10	Transport sims	Jason Zimmerman, CCP
1:10 - 1:25	ECPR sims	Timothy Byrne, MD
1:25 - 1:40	Circuit emergency sims - which ones are most useful	Mary Frances Quinn, RN
1:40 - 1:50	Debriefing sims	Simmie Kalan, RN
1:50 - 2:00	Discussion and questions	
<b>2:00 - 2:10</b>	<b>Exhibitors / Poster Session</b>	
<b>2:10 - 3:25</b>	<b>Breakout 1: From Bench to Bedside</b>	Moderators: Robert Bartlett, MD, Daniel Brodie, MD
2:10 - 2:25	Porcine model of pediatric ECPR - how long is too long before devastating traumatic brain injury	Todd Kilbaugh, MD
2:25 - 2:40	Prolonged organ circulation	Jonathan Haft, MD
2:40 - 2:55	New cannula design - look into the future	Jay Zwischenberger, MD
2:55 - 3:10	ARDS Subphenotypes: Moving Closer to Precision Medicine in the ICU	Carolyn Calfee, MD
3:10 - 3:25	Discussion and questions	
<b>2:10 - 3:25</b>	<b>Breakout 2: Ask the Experts - Adults</b>	Roberto Lorusso, MD, Melissa Doucette, CCP, Kiran Shekhar, MD, Peter Eckman, MD,
<b>2:10 - 3:25</b>	<b>Breakout 3: We Hate When They Happen but They do - ECMO Related Complications - Recognition, Management and Prognosis</b>	Moderator: Steven Conrad, MD PhD
2:10 - 2:25	You got it stuck where? It's in what? Troubleshooting double lumen cannulas	Melissa Brunsvold, MD
2:25 - 2:40	Circuit disasters - you need to act fast!	Desiree Bonadonna, CCP
2:40 - 2:55	Bugs and ECMO - how to prevent and treat ECMO associated infections	Jenelle Badulak, MD
2:55 - 3:10	Catastrophic brain bleeds in children	Shri Deshpande, MD
3:10 - 3:25	Discussion and questions	
<b>2:10 - 3:25</b>	<b>Breakout 4: Different Models of ECMO Specialists and How Best to Train Them</b>	Moderator: Elizabeth Moore, MBA, RN
2:10 - 2:20	Perfusionists	Justin Sleasman, CCP
2:20 - 2:30	RNs	Kelly Tointon, CCP
2:30 - 2:40	RTs	David Hebert, RRT-NPS
2:40 - 3:00	Debate: only perfusionists should sit ECMO	Tim Maul, CCP, PhD vs Elizabeth Moore MBA, RN
3:00 - 3:10	ELSO individual practitioner certification - how far from reality	Jenelle Badulak, MD
3:10 - 3:25	Discussion and questions	
<b>3:25 - 3:35</b>	<b>Exhibitors / Poster Session</b>	
<b>3:35 - 4:05</b>	<b>Exhibitors/Posters/Committee Updates/Sponsored Talks</b>	
3:35 - 4:05	<p>Patient and Family Experiences</p> <p>Esperanza Pineda : First Neonatal Patient Experience  Hannah Abraham: Neonatal Experience  Stephanie Pleuss: Teenager Respiratory Experience  Jay Shiland &amp; Elizabeth Maringer: Adult Respiratory Experience  Tonia Elrod: Adult Cardiac Experience</p>	Moderators: Robert Bartlett, MD, Elaine Cooley, MSN, RN, LRT

3:35 - 4:05	ELSO Registry Update	Ryan Barbaro, MD
3:35 - 4:05	ELSO Education Committee Update	Bishoy Zakhary, MD, Jenelle Badulak, MD, Elizabeth Moore MBA,RN
3:35 - 4:05	Sponsored talk brought to you by Medtronic: The evolution of ECMO catheters: Dual and Single Lumen designs	William Jakobleff, MD, Jeremiah Hayanga, MD
3:35 - 4:05	Near term vision for ambulatory lung	Bartley Griffith, MD
<b>4:05 - 4:15</b>	<b>Exhibitors / Poster Session</b>	
<b>4:15 - 5:30</b>	<b>Breakout 1: Patient Management - How to Best Approach COVID-19 Patients</b>	Moderator: Justin Sleasman, CCP
4:15 - 4:30	Results from 150 ECMO Procedures for COVID-19 Patients	Al Stammers, MSA,PBMS,CCP Emeritus
4:30 - 4:45	The joint perfusion COVID-19 task force: A model of global collaboration	Jim Reagor, CCP
4:45 - 5:00	59 long ECMO road to recovery - challenges, frustrations and lessons learned	Ramiro Saavedra, MD, Bryan Waits RN
5:00 - 5:15	Team & Program Stress Management during COVID-19	Bridget Toy, RN
5:15 - 5:30	Discussion and questions	
<b>4:15 - 5:30</b>	<b>Breakout 2: Resuscitation in Special Populations</b>	Moderator: Karol Mudy, MD
4:15 - 4:30	REBOA in traumatic hemorrhagic shock - why, when and how?	Valerie Hart, MD
4:30 - 4:45	VV ECMO in trauma - how long to support?	David Zonies, MD
4:45 - 5:00	Unusual circuit configurations for unusual situations	Kiran Shekhar, MD
5:00 - 5:15	Unique aspects of resuscitation in pregnancy	Lisa Kirkland, MD
5:15 - 5:30	Discussion and questions	
<b>4:15 - 5:30</b>	<b>Breakout 3: What's New in ELSO Guidelines</b>	Moderator: Ravi Thiagarajan, MD
4:15 - 4:25	What is the process?	Lakshmi Raman, MD
4:25 - 4:35	ECMO transport	Ahmad Labib Shehatta, MD
4:35 - 4:45	Pediatric ECPR	Anne-Marie Guerguerian, MD
4:45 - 4:55	Neurodevelopmental follow up in children	Aparna Hoskote, MD
4:55 - 5:05	Fluid management in pediatrics	Brian Bridges, MD
5:05 - 5:15	Fluid management in adults	Kollengode Ramanathan, MD
5:15 - 5:30	Discussion and questions	
<b>4:15 - 5:30</b>	<b>Breakout 4: How to Credential Physicians and is it Even Needed</b>	Moderator: Bishoy Zakhary, MD
4:15 - 4:25	Surgeon's perspective	Karol Mudy, MD
4:25 - 4:35	Adult intensivist's perspective	Kiran Shekar, MD
4:35 - 4:45	Cardiologist's perspective	Kasia Hryniewicz, MD
4:45 - 4:55	Pediatrician's perspective	Shri Deshpande, MD
4:55 - 5:05	Neonatologist's perspective	Lindsay Johnston MD, MEd
5:05 - 5:15	Putting it all together	Michael McMullan, MD
5:15 - 5:30	Discussion and questions	Panel
<b>5:30 - 5:35</b>	<b>Closing remarks</b>	Matthew Paden, MD - ELSO President