



## Message from the President

Welcome to the October 2023 ELSO Newsletter.

ELSO's 34th Annual Conference was the biggest and most successful to date, with over 1500 registrants. Thank you very much to Cara Agerstrand, the rest of the Conference Committee, and all the hard workers at the ELSO Office for making this happen. Cara is completing her term as ELSO's Conference Chair and what a way to bow out. We also thank all our speakers and industry sponsors, without whose support and energy the conference would not have been possible.



A number of others are stepping down from their roles on ELSO's Steering Committee. Research Chair Eddy Fan, Publications Chair Lakshmi Raman, and Nominations and Membership Chair Jenelle Badulak are being succeeded by Roberto Lorusso, Kollengode Ramanathan, and Pablo Sanchez, respectively.

Roberto Lorusso is well-known in the ELSO community, Professor of Cardiothoracic Surgery and ECMO at the University of Maastricht, Holland. He has clearly articulated an ambitious vision for how ELSO should further its research agenda and we look forward to seeing this take shape. Kollengode Ramanathan is a senior consultant in the Cardiothoracic ICU at National University Hospital, Singapore, has a formidable track record in ECMO research, and will gain oversight over ELSO's official publications output. Pablo Sanchez is Chief of Lung Transplantation at the University of Pittsburgh and has been working hard with his predecessor to create new processes for ECMO clinicians volunteering for ELSO projects. Finally, Natalie Rintoul is Medical Director of the Neonatal ECMO program at the Children's Hospital of Philadelphia and takes over as ELSO's Conference Chair.

ELSO warmly welcomes these talented individuals to the Steering Committee and looks forward to working with them to further its mission of providing global leadership in extracorporeal life support through innovation, advocacy, and advancing knowledge.

The Asia-Pacific Chapter of ELSO holds their 6th conference in Seoul, November 2-4. The line-up of speakers looks fabulous (<https://www.apelso2023.org/>) and the South Korean capital is an enormous and endlessly fascinating metropolis. South Korea performs thousands and thousands of ECMO runs every year and I'm sure the meeting will be extremely informative for everyone fortunate enough to attend.

Graeme MacLaren, President, ELSO

Editor: Kennethia Banks

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## COMMITTEE ROUNDUP

### Conference Committee

The 34th Annual ELSO Conference was held on September 28th – October 1st in Seattle, Washington. We had a robust scientific agenda delivered by ECMO experts from around the world. Exciting developments in artificial lung technology, moderated discussion on ethics in ECMO, hot topics such as cutting edge research pulmonary hypertension, ECMO transport and mobilization, and so much more! The pre-conference featured a robust dive into ECMO physiology, patient management and dissection of challenging clinical scenarios.

Please join us virtually at the 34th Annual ELSO Conference. We are happy to offer a virtual program which also includes CME/CEU for MD/RN. The pre-conference "ECMO Management and Physiology" is included as well as the presentations along with the videos.

The virtual platform is available through January 25, 2024, with accompanying (and more) CME credits available.

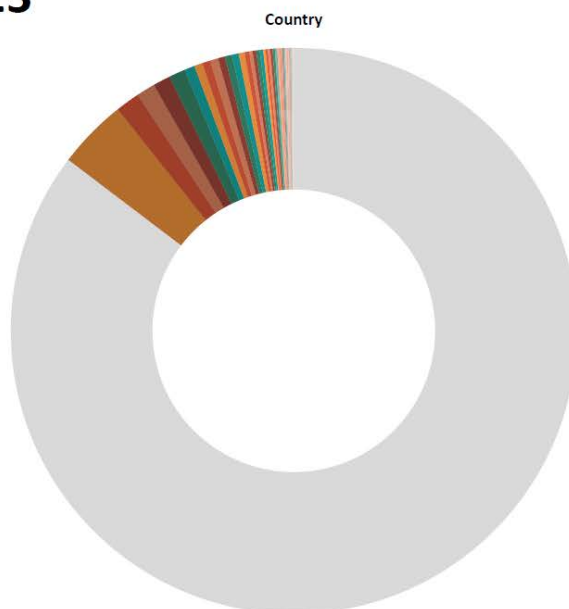
ELSO would like to thank our Platinum Sponsors, Getinge and Fresenius Medical Care as well as the other 25 sponsors, speakers, volunteers and attendees for making this an amazing event.

We are honored and grateful with the global community that gathered together in Seattle, Washington last month. Thank you for your collective energy and enthusiasm for ELSO!

### Attendance Overview – 2023

1,507 in person attendees from 39 countries (85% US); 1,304 in person in 2022 (86% US).

Work Country	Invitees and Registrants	%
USA	1,286	85%
Canada	60	4%
Australia	21	1%
Germany	16	1%
Republic of Korea	15	1%
Netherlands	14	1%
United Kingdom	9	1%
Israel	7	0%
Japan	7	0%
Sweden	7	0%
(No Value)	6	0%
Kuwait	6	0%
Saudi Arabia	6	0%
United States Minor Outlying Islands	5	0%
Singapore	4	0%





Opening Plenary Session



Exhibit Hall



2023 FELSO Inductees



Froehlich Awardee Ceremony



Best Abstracts Awardees



Core Volunteer Team

[See more photos here](#)



## ELSO & Chapter Meetings

**Event:** 34th Annual ELSO Conference

Location: Virtual

Dates: October 13th - January 31, 2024

[Register Here!](#) [Agenda](#)

**Event:** 6th APELSO Conference

Location: Seoul, South Korea

Dates: November 2th -4th, 2023

Registration Information: <http://apelso2023.org/>

**Event:** 10th Annual SWAACELSO Conference

Location: Kuwait City, Kuwait

Dates: February 15th -17th, 2024

Registration Information: <https://www.swaacelso2024.com/>

**Event:** 12th Annual EUROELSO Conference

Location: Krakow, Poland

Dates: April 24th -27th, 2024

Registration Information: [Coming Soon!](#)

**Event:** 35th Annual ELSO Conference

Location: Huntington Place, Detroit, MI

Dates: September 28th - October 1st, 2024

**Event:** 6th LATAM Conference

Location: Buenos Aires Argentina

11/14/2024 - 11/16/2024

Registration Information: Coming Soon!

*The latest information on ELSO & Collaborative Meetings can be found [here](#).*



# 35TH ANNUAL ELSO CONFERENCE DETROIT, MI SEPTEMBER 28TH - OCTOBER 1ST, 2024



The 2024 NFL Draft is scheduled to be held around Campus Martius Park and Hart Plaza in Detroit, Michigan



## Quality Committee - Award of Excellence



This year ELSO awarded 22 Platinum Centers, 54 Gold Centers and 27 Pathways to Excellence centers for the time period of 2024 through 2026. Congratulations to all! All awards will be mailed out starting December 1st. If you have any questions contact [award@elso.org](mailto:award@elso.org).

The opening date for next year's application (2025-2027) for Award of Excellence in Life Support has been changed to December 1st, 2023. Luckily you do not need to wait until then to download the Award Evaluation & Improvement Tool! Fall is a great time to form your application team, review and reflect on quality improvements you have made, and start writing your application.





## Research Committee

The Research Committee presented its plans for the next few years at ELSO, which include:

- Expert Consensus Scientific Papers
- Randomized Controlled Trials
- Prospective Studies

As we embark on this next phase of research, we look forward to inviting people in to be part of this important endeavor to advance knowledge in ECLS. Areas of study are forming. Roberto Lorusso is developing a core team to help coordinate and plan the priority objectives.

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## Registry Committee

The international and chapter specific reports were updated on October 17th with data through the end of 2022.

Be sure to submit your center's data which allows you the opportunity to benchmark your data.

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## ELSO Publications

ELSO has a growing list of publications available.

- The ELSO Red Book - 6th Edition
- ECMO Specialist Training Manual - 4th Edition (5th Edition in development)
- ECPR and Resuscitative ECMO
- Post-Cardiotomy ECLS and other Temporary Mechanical Circulatory Supports in Adult Patients, with Roberto Lorusso as Senior Editor and a robust team of international authors.
- Neonatal and Pediatric ECMO Simulation Scenarios - developed in partnership with IPSS
- A Korean translation of the ELSO Red Book - 5th Edition
- Spanish translations of the ELSO Red Book - 4th Edition and ECMO Specialist Training Manual - 4th Edition

Visit our website for the full list of available publications: <https://www.elseo.org/Publications.aspx>



## Education Committee/ELSO Academy

### ELSO – Adult ECMO Certification (E-AEC) Exam

ELSO has outlined standardized educational criteria and launched an online application process via ELSO Academy for ECMO clinicians who have demonstrated satisfactory completion of criteria listed on our website. This journey is designed to be inclusive of the entire ECMO interprofessional team. Certification is valid for three years; upon which time a renewal can be pursued to maintain certification. For additional information, please visit:

<https://www.elseo.org/Education/certificationexam.aspx>

### ELSO Foundations

ELSO Foundations: Adult ECMO Training Course is a self-paced ECMO course consisting of 53 modules, covering over 80 learning objectives which are anchored in the foundational concepts that will allow practitioners to develop, strengthen, and refine clinical skills related to ECMO patient care skills.

The Spanish translation version of the Adult ELSO Foundations course has been very popular.

ELSO Foundations: Neo/Peds ECMO Training Course is under development.

### ELSO Training Courses

We will be announcing more new courses soon. Don't miss anything by checking [here](#).

ELSO Neonatal and Pediatric ECMO Training Course

Date: November 6th, 2023

Location: Virtual

Time: 2:00PM - 4:00PM EST

[Register Here](#)

ELSO Extracorporeal Membranous Oxygenation (ECMO) Adult Simulation Course - *Course is full*

Dates: November 8th-9th, 2023 (Session 1) November 10th-11th, 2023 (Session 2)

Location: ELSO Headquarters

Address: 3001 Miller Road Ann Arbor, MI, USA

ECMO Cannulation Workshop (1-Day Workshop)

Dates: November 12th, 2023 (Session 1) and November 13th, 2023 (Session 2)

Location: ELSO Headquarters

Address: 3001 Miller Road Ann Arbor, MI, USA

[Register Here!](#)

ELSO Extracorporeal Membranous Oxygenation (ECMO) Adult Simulation Course at SCCM

Dates: January 19th - 20th, 2024

Location: Phoenix, AZ

[Register Here!](#)

The 2024 course dates will be posted on our [website](#) by October 31, 2023



## Nominations & Membership Committee

The Nominations & Membership Committee are working hard on a new process for getting involved at ELSO. Thank you for your interest in being involved in the committees. While we work on an application calendar, should you want to get involved, please let us know: [nomination@elso.org](mailto:nomination@elso.org).

Our members span individual members, centers, and device developers. Let us know if there is an area of work that you would like ELSO to focus on.

## ELSO Communities



As a global nonprofit organization, we wanted to be able to provide a communication tool that was accessible on cell phones, an app that was globally available (or close), free, and had encryption technology for secure messaging. We selected WhatsApp as the platform for ELSO Communities for these reasons. It is not perfect, but a good way to start.

To join a community visit the ELSO [website](#). You will be required to download WhatsApp on your phone. Communities are designed to be a support for our members that want to connect, collaborate, and support each other on a topic.

ELSO has several communities for you to participate in including New ECLS Program, Adult Cardiac, Adult Respiratory, Coordinators, Directors, ECMO Equipment, Procedures and ECMO, Platinum Mentors, Neo/Peds ECMO, and ELSO ECMO Patients & Families.

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## Coordinator's Corner

Thank everyone to all for attending the in-person Coordinator's Meeting at the 34th Annual ELSO Conference in Seattle, Washington! Below you will find some of the topics that were discussed at this year's meeting. To receive the complete meeting summary contact ELSO's Coordinator Liaison Rob Hyslop, at [rhyslop@elso.org](mailto:rhyslop@elso.org).

### Topics of Discussion

- Mentor Opportunities
- Equipment Shortages
- ECMO Specialist Recognition
- Additional ECMO Programmatic Discussion

## ECMO EQUIPMENT UPDATES

We have a new survey on equipment supply issues. Please share your perspective and experience with the current challenges we face. This survey is designed to achieve a more quantitative understanding of the issues we face. Please complete the survey by Friday, November 10, 2023. As before, we will share findings with you and our stakeholders in an effort to help support each other and mitigate these issues in the future.

Survey: <https://www.surveymonkey.com/r/ECMOEquipment2>

Updates on the general equipment updates will continue to be available here: <https://www.else.org/ecmo-resources/ecmoequipmentupdates.aspx>. In addition, please use the ELSO Equipment WhatsApp community to share issues and ideas with each other. This has been an enormous help.

We also want to acknowledge the FDA in the US for their support, engagement, and willingness to lean in during this time. The FDA sent four colleagues to participate in a variety of ways at our conference in Seattle, which is a nice representation of their commitment to ECLS equipment. More to come.



Nicole Gillette, Assistant Director, Circulatory Support Devices Team, CDRH, FDA and Kathleen Grunder, Biomedical Engineer, CDRH, FDA speaking at ELSO Conference on ECMO Equipment Session.



## SURVEY ALLEY

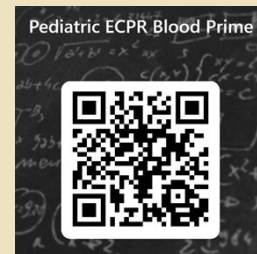
### ECPR and Blood Priming

Description: Our objective is to benchmark our institutions blood priming process in ECPR with other pediatric ELSO facilities. By learning how other pediatric institutions prime their circuits for ECPR, we will be able to improve our processes and patient outcomes.

<https://forms.office.com/r/UJJqygEs7d>

Thank you in advance for participating.

Zak Watts, Advocate Children's Hospital - Oak Lawn



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### Utility of hyperoxia in ECMO Survey

Dear all,

We are conducting a brief survey on the use of the hyperoxia test to assess a patient's readiness for decannulation from VA/VV ECMO. Your feedback is very valuable to us, and we greatly appreciate your participation. The survey is voluntary and will take approximately 1 minute to complete.

Your responses will remain anonymous, and no individual (or organization) will be identified in our reporting of the data.

To start the survey, please click on the following link: <https://redcap.link/f5syr0n9>

We want to thank you in advance for participation and also helping us collate all data at your earliest convenience. Please complete the survey by November 15, 2023. We will collate and distribute the final responses.

If you have any questions about this survey, contact any one of us.

Respectfully,

Caraciolo Fernandes, MD, MBA; [fernande@bcm.edu](mailto:fernande@bcm.edu) ; Morcos Hanna, MD; [morcos.hanna@bcm.edu](mailto:morcos.hanna@bcm.edu); and Sharada H. Gowda, MD [shgowda@bcm.edu](mailto:shgowda@bcm.edu)



## ELSO CHAPTER UPDATES: ECMO AROUND THE WORLD

### APELSO UPDATES

APELSO Congress will be held in Seoul, Korea from November 2nd - 4th, 2023. We look forward to seeing everyone there! [Register HERE!](#)



# 6<sup>th</sup> APELSO 2023

"Post Pandemic, New Standards"

Joint with 55th Annual Meeting of the Korean Society for Thoracic & Cardiovascular Surgery

November 2 (Thu) ~ 4 (Sat), 2023

Grand Intercontinental Seoul Parnas, Seoul, Korea

November 2 (Thu)				
Room	Grand Ballroom 1+2 (PT)	Room A Convex (PT)	Room B Chryseionroom (PT)	Room C Rose (PT)
07:30-08:30	Registration			
08:30-10:00	Opening and Keynote Address			
10:00-10:30	Break, Poster Presentation & Exhibition			
10:30-12:30	Plenary Session			
12:00-12:30	Break for room partition			
12:30-12:30	Lunchtime Session			
12:30-14:00	A Prerequisite Skill to ECMO Following Resuscitation and Prolonged Support	VX ECMO in Resuscitation and Post-ICU ECMO: Insights from Patients and Families	How do I do it?	
14:00-15:10	Break, Poster Presentation & Exhibition			
15:10-16:30	Cardiopulmonary Bypass and ECMO: A Review of the Literature and Current Practice	Sustaining Resuscitation and ECMO: Insights from Patients and Families	Speaker Session	
16:30-16:50	Break, Poster Presentation & Exhibition			
16:50-18:10	ECMO in Pediatric Cardiac Surgery: A Review of the Literature and Current Practice	ECMO Device: Cutting Edge Technology	Speaker Session	
18:30-	Welcome Ceremony - Grand Intercontinental audience			
November 3 (Fri)				
08:00-09:00	Round Table Discussion on Emergency Issues with Multi-Organ Dysfunction Syndrome			
09:00-10:20	Resolving AECV and Exacerbated Distress in ECMO Patients: A Review of the Literature and Current Practice	Real-World Experience	ECMO education	
10:20-10:40	Break, Poster Presentation & Exhibition			
10:40-12:00	Resolving and Distress in ECMO Patients: A Review of the Literature and Current Practice	Information and Communication	ECMO education	
12:00-12:00	Lunchtime Session			
12:30-14:20	Prone Position during ECMO	Configuring ECMO: Monitoring Comp Transcription		
14:20-14:40	Break, Poster Presentation & Exhibition			
14:40-16:20	Managing Septic Shock	Configuring and Starting ECMO program		
16:20-16:20	Break, Poster Presentation & Exhibition			
16:20-17:40	Real-World ECMO practice: Lessons learned	Time to set new standards: Quality improvement in ECMO		
18:30-	Gala Dinner - Floating Island Convention Center (free cost)			
November 4 (Sat)				
08:00-09:00	Round Table Discussion 2 (ECMO-CV 9th)			
09:00-10:20	Practicalities of ECMO in Pediatric ECMO	Newborn Issues in Adult VA-ECMO		
10:20-10:40	Break, Poster Presentation & Exhibition			
10:40-12:30	APELSO regional updates			
12:30-	Award & Closing Session			

### REGISTRATION FEE

Early Bird Registration

By Sep. 25, 2023



Qualification	Early Bird Registration
Physician	US\$ 600
Non-Physician	US\$ 200

### APELSO 2023 AT A GLANCE

- 1
**Exclusive Networking with ECMO Experts :**  
 An invaluable in-person opportunity to connect with exclusive ECMO professionals.
- 2
**Hands-On Experience :**  
 Experience ECMO firsthand through immersive live simulation courses.
- 3
**Engage in In-Depth Discussions :**  
 Engage in meaningful discussions with ECMO experts from the Asia-Pacific region.

### JOIN OUR SOCIAL PROGRAM

▶ **Welcome Ceremony**  
 Date : November 2(Thu), 18:30-  
 Venue : Grand Intercontinental Seoul Parnas

▶ **Gala Dinner**  
 Date : November 3(Fri), 19:30-  
 Venue : Floating Island Convention Center  
 Gala Dinner Registration Fee : USD 70

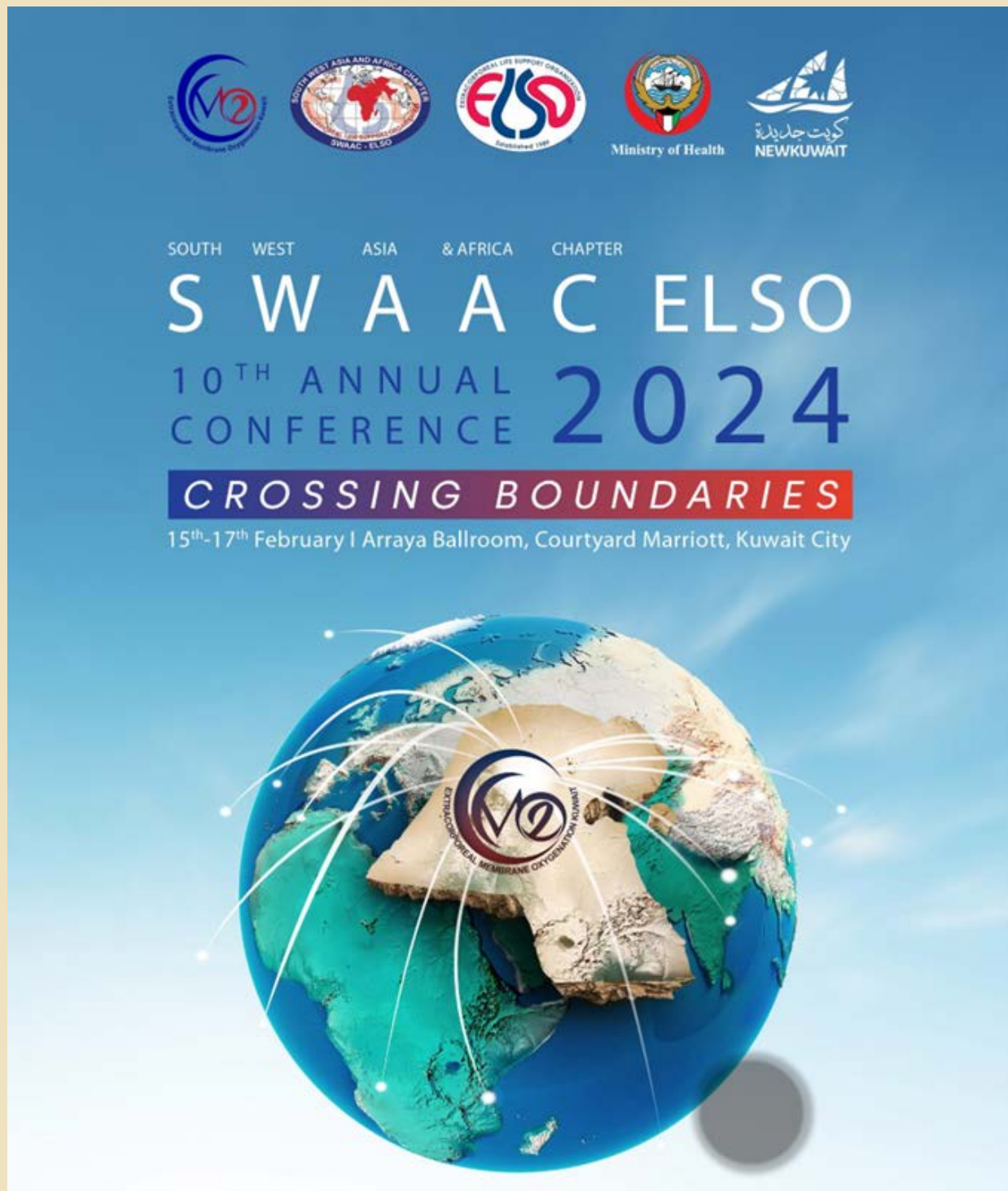
### Contact us

+82-2-6002-1383    [www.apelso2023.org](http://www.apelso2023.org)

[secretariat@apelso2023.org](mailto:secretariat@apelso2023.org)

## SWAAC ELSO UPDATES

Planning and development is underway for the 2024 SWAAC ELSO Conference located in Kuwait City, Kuwait February 15th - 17th, 2024. Hope to see you there! [Register HERE!](#)



The poster features a blue background with a globe at the bottom. At the top, there are five logos: the M2 logo, the SWAAC-ELSO logo, the ELSO logo, the Ministry of Health logo, and the New Kuwait logo. Below the logos, the text reads: 'SOUTH WEST ASIA & AFRICA CHAPTER', 'S W A A C ELSO', '10<sup>TH</sup> ANNUAL CONFERENCE 2024', and 'CROSSING BOUNDARIES' in a red banner. At the bottom, it says '15<sup>th</sup>-17<sup>th</sup> February | Arraya Ballroom, Courtyard Marriott, Kuwait City'. The globe has white lines connecting various points, and the M2 logo is overlaid on it.

## EUROELSO Updates

The 2024 Euro ELSO Conference will be located in Krakow, Poland from April 24th -27th, 2024. For more information, click [HERE](#)! See you soon!



12TH  
**EURO  
ELSO**  
KRAKÓW

24-27 APRIL  
2024

**SAVE  
THE  
DATE**

Bridging  
Europe

Interplan AG  
Phone: +49-40-325092 30  
Email: [euroelso@interplan.de](mailto:euroelso@interplan.de)

[www.euroelso-congress.com](http://www.euroelso-congress.com)



## LAELSO Updates

The 6th Semi-Annual ELSO LATAM Conference will be held in Buenos Aires Argentina, November 14th – 16th, 2024. For updates and more information please visit <https://elsolatam.net/>



## CHIEF EXECUTIVE OFFICER REMARKS

In academia, fall is the start of the year. Not only do the seasons change with a show of force in color change, but the energy we bring when we plan new things together each fall season propels us to do more.

ELSO's 34th Annual Conference started with Michael Knapinski and his many teams that comprised his chain of survival from hypothermia on Mt. Rainier. Jenelle Badulak facilitated this touching and inspiring story that showed what is possible when we come together to function as one team, one system. This sets a high bar for what is possible and why we try harder, again. The latest ECPR investigators re-emphasized the value of systems - an important success factor when applied consistently over the duration. This is patient work, but worth the time and effort. More research can be done to further elucidate the system component, among other things.

Looking ahead we have so much to be excited about as a community. With the ELSO Registry near 210,000 patient runs, our pool of knowledge for new findings continues to grow. The Registry has value in its global and inclusive nature - the more we work together, the more we can learn and do better together for our patients. ELSO will continue to improve data quality and expand the scope to meet our community's needs. Quality measures, benchmarking, and continuous improvement are at your fingertips and an important tool for every team.

We have ambitious plans for advancing knowledge, supporting each other, and collaborating across communities. I see this every day in how members work together in all facets across ELSO, including the WhatsApp communities. The Steering Committee has done more work to make it easier to become involved in ELSO, so please do!

My greatest impression of our time together in Seattle is the energy and enthusiasm we have as a global community - strong because of our different skills, expertise, and diversity.

Christine Stead, CEO

Fall Foliage, ELSO Headquarters Ann Arbor, Michigan by Christine Stead





# The Extracorporeal Life Support Organization

## Our Mission

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

## Our Vision

ELSO will be the premier organization for the advancement of extracorporeal life support throughout the world.

## Guiding Principles

### Innovation

Seeking to identify and promote advances for the application of extracorporeal therapies.

### Expertise

Bringing together world leaders in the care of critically ill patients for collaboration to advance quality of care through education and publication.

### Clinical Support

Maintaining a comprehensive registry of data to assist in reducing morbidity and improving survival of patients requiring extracorporeal therapies.

### Community

Fostering communication and collaboration among professionals who apply advanced technologies in the treatment of refractory organ failure.



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The Extracorporeal Life Support Organization (ELSO)  
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[www.elso.org](http://www.elso.org)

For editorial concerns related to this newsletter, please contact [newsletter@elso.org](mailto:newsletter@elso.org).

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