

ELSO NEWSLETTER

Message from the President

Matthew Paden, MD

A sense of gratitude and thankfulness this time of year is common for many of us in the Northern hemisphere, with the Spring blooms, changes in the weather, and Summer well on its way.



This year particularly, we are also grateful for COVID-19 vaccinations making their way around the globe, and hopefully putting an end to this pandemic. We hope this trend continues, along with continued relief to the regions still struggling from this disease. Throughout the past year, I continue to be impressed with how our global community comes together to help and care for each other. Of all of the things to come out of this pandemic, I hope that sense of worldwide community persists and thrives.

I am appreciative of all of the ongoing work being done by all of our members, committees, and ELSO staff. Planning is well under way on many fronts for ELSO, and the following year is going to be filled with many wonderful offerings. Our 32nd Annual Conference will occur through a virtual platform only on 9/30/21 - 10/1/21, and we are excited about the combination of scientific content, education, and opportunities for fellowship at the meeting. Our Annual Conference gives us a platform to showcase the world class research, clinical care, ELSO registry outcomes, new educational offerings, and partnerships and collaborations that our centers and members produce to improve the care of our patients. The recent very successful Euro-ELSO conference set a high standard, and we are looking forward to seeing all of our worldwide friends and colleagues soon.

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ELSO recently welcomed two new members to our Board of Directors, Jay Shiland and Elizabeth Maringer. They are the first non-clinician members of ELSO's Board of Directors, yet provide real bedside experience, with Jay being a former ECMO patient and Elizabeth a former family member of a patient (Jay). Both have had exceptional career success, and experience with other non-profit organization boards. Most importantly, they are exceptionally committed to helping ELSO grow and thrive. We look forward to their contributions to ELSO.

Soon ELSO will begin a strategic planning endeavor, and we seek input from our centers and members as we plan our future together. I am particularly grateful for being able to help start the process of building this future upon on ELSO's strong foundation.

Matt Paden, MD
President, ELSO

Editor, Omar Alibrahim, MD
Co-Editor, Kennethia Banks

Welcome to ELSO's New Board Members

ELSO Welcomes Jay Shiland and Elizabeth Maringer to the Board of Directors



Elizabeth Maringer

As an ECMO survivor, Jay Shiland, brings the perspective of both a patient and non-clinical healthcare investment professional to the ELSO Board of Directors. In 2010, at age 41, Jay developed severe ARDS from pneumonia. At that time, ECMO was less prevalent as a life support option for adults and there were only a handful of hospitals in the country using ECMO to bridge an adult patient through a critical illness. Through their experience, Jay and his wife, Elizabeth Maringer, became close to Jay's medical team and have come to know Dr. Bartlett and the work of ELSO over the years. They share a commitment to help ELSO expand its national and global reach, and to accelerate advances and provide expanded opportunities for access to ECMO as a lifesaving technology. Elizabeth brings the perspective of a family member of an ECMO patient to the Board, and frequently speaks with families of other ECMO patients to help them through their crises.



Jay Shiland

Elizabeth brings multiple perspectives and experience to the ELSO Board. She is Senior Vice President and Assistant General Counsel – Integrity and Investigations for the National Basketball Association, where her responsibilities include investigations across a broad range of subject areas, conduct and discipline matters, domestic violence and sexual assault policy and proceedings, arbitration, and litigation. She was previously Global Head of Intelligence and Investigations at Stroz Friedberg, LLC, an investigative consulting firm. Before that, Elizabeth served for over 12 years as a federal prosecutor in the United States Attorney's Office for the Southern

District of New York, including three years as Deputy Chief of the Criminal Division. Elizabeth earned her Juris Doctorate from Fordham Law School and her Bachelor of Arts from Dartmouth College. She also has experience serving on other nonprofit boards.

Jay is a Partner at MTS Health Partners, L.P., a boutique healthcare-focused investment bank that provides strategic and financial advice to the healthcare industry. Jay has advised many of nations' leading public and private health services companies and has also led a number of the largest and most complex healthcare services restructurings. Jay also serves on the Board of the Schwartz Center for Compassionate Healthcare, the only national nonprofit organization dedicated to promoting compassionate, patient-centered care. Jay earned his Juris Doctorate from Harvard University and his Bachelor of Science from The Wharton School of the University of Pennsylvania.

We are excited for both Elizabeth and Jay to join the Board and look forward to their contributions in shaping our future. Please welcome Elizabeth and Jay to the ELSO family.

ELSO Office Dedication

In January 2021, ELSO completed its move off the campus of the University of Michigan to a newly-leased office space in suburban Ann Arbor, Michigan. The new space offered an opportunity to recognize the extraordinary legacy of our Founder and Board Member Emeritus, Dr. Robert Bartlett, by dedicating our new conference room in his name.

Several of the ELSO staff were present to officially dedicate this space in his honor prior to a meeting of the Board of Directors. Dr. Bartlett's wife, Wanda, joined the surprise celebration in tribute to his immeasurable contributions to our organization.



Peter Rycus, Christine Stead, Wanda Bartlett, Kennethia Banks, Dr. Bartlett, and Elaine Cooley

ELSO's 32nd Annual Conference

ELSO's 2021 Annual Conference - Coming Soon!

Following on the success of the 2020 Annual Conference, ELSO will once again host its Annual Conference in a virtual format. The 2021 Annual Conference will be September 30 - October 1. There will be a free session for Coordinators and Directors preceding the conference on September 29, 2021. Registration information details will be available in the coming weeks. Abstract submissions are being accepted now. See Conference Committee for more details.

We look forward to welcoming our global community back for two days of community & knowledge sharing!

ECMO Patient Story

Contributed by Brianna Ptak, a former ECMO patient. Edited by Dr. Omar Alibrahim.

At age 16, with credit to my academic successes, I graduated high school, enrolling in the Athletic Training program at a local private college. School not turning out as I had hoped, I opted to take a semester off. I began working two jobs, routinely clocking 40+ hours per week. I started to tire. Given the nature of my work – with many long hours on my feet – I brushed my fatigue off as nothing in particular. It never occurred to me I could be sick.

My doctor found otherwise: I had mononucleosis. Prescribed a 7-day steroid treatment, I was on the road to recovery. On the evening of my final dose, I began experiencing increasingly worse symptoms. First, an aching feeling under my left ribcage and a throat so sore I couldn't speak. A couple days later, November 11, 2014, my symptoms rapidly worsened and my mom rushed me to the emergency room at a local hospital.

Mononucleosis had caused my spleen to enlarge and eventually contributing to Acute Respiratory Distress Syndrome (ARDS), my inflamed lungs making it impossible to breathe on my own. A team transferred me to Buffalo Women and Children's Hospital (now Oishei Children's Hospital). Their team placed me on ECMO. It was my only option to survive.

As the doctors were giving my parents the news of a successful procedure into my lungs, I went into cardiac arrest. My family watched helplessly as the team performed CPR. After 18 minutes of standing by, they decided they could no longer watch. They had to walk away, accepting the fact that they may lose their daughter.

Surrounded by family and friends, all praying for a miracle. In truth, it was likely a matter of minutes before the physicians would call my time of death. Their prayers were answered. My vitals were coming back. Cardiac arrest had substantially weakened my heart, and a switch from venovenous to venoarterial ECMO was the only option for survival. Yet again, I went into cardiac arrest. And again, the team was able to stabilize me. And so my ECMO journey began.

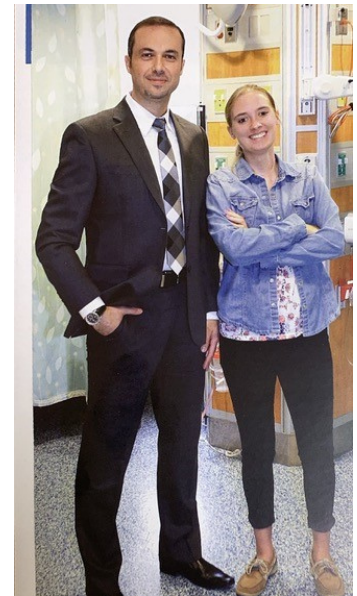
My time on ECMO was, and will always be, a blur to me. It was as if my brain was shut off for a few months. Coming off ECMO, it was a strange feeling to wake up and how much time had passed. Only then did I learn about my event, told entirely through my family and friends. After two-and-a-half months in the hospital, and countless procedures, I was released to inpatient rehabilitation in January 2015.

I will never forget the day I arrived at inpatient rehab. It was the first time I really looked at myself in the mirror. I was devastated. I did not recognize myself. *How could I go from a strong, athletic, and healthy young woman to a frail, skinny, sick girl in a flash?* I had scars in places I never had before. The one running down the length of my neck where the ECMO cannula kept me alive: I was horrified by it. I had stitches and a feeding tube. My face and feet now drooped due to the trauma. I was blind in my right eye. I just could not believe it. But something inside told me to be strong and keep going to see what tomorrow held.

The next morning, I woke determined to take on the day by washing and dressing myself. I remember my first shower. It felt so good that I didn't want to get out. Physical therapy proved to be challenging yet highly rewarding. I was continuing to struggle, but I was also continuing to improve. A short time later, I was released to home treatment.



It was during those first weeks home that I began feeling like me again. I started feeling and seeing positive improvements. As the months passed by, I became eager to begin the next chapter in my life. I started researching different careers, but nothing felt right. One day I remembered my parents talking about how the ECMO machine was monitored 24/7. I became curious and researched the machine and those responsible for it: nurses, perfusionists, and respiratory therapists. As I learned about respiratory therapy, I saw photos of endotracheal and tracheostomy tubes. They brought back memories of my own treatment.



I found a Respiratory Care program at a local college and applied for admission. When I was interviewed by the program director, he asked me why respiratory? I smiled and said, "Well, it is a pretty long story." And so I told him about my journey on ECMO.

Five years later, my life has changed forever. I am a Respiratory Therapist in hope of becoming ECMO specialist or even a perfusionist one day. My life goal is to save lives in the same way I once was saved. Sometimes life has a way of placing you right where you belong – in my case, come full circle.

Editor's Note: ELSO would like to thank Brianna Ptak for contributing her story to this edition of the ELSO Newsletter. If you would like to contribute a patient story to a future newsletter, please contact us at newsletter@ELSO.org.



Committee Roundup

Conference Committee

ELSO is planning a virtual conference for 2021. Save the dates: September 30 - October 1, 2021. Registration information will be available in the coming months. Watch for updates on our website, email, and social media.

Abstract submissions are being accepted now! Please submit your abstract using a link [here](#). Deadline for abstracts is July 15, 2021. Applicants will be notified during the first week of August of acceptance. Accepted abstracts are published in the ASAIO Journal as a supplement.

Registry Committee

Recently the deadline for data entry has changed. ELSO recognized that using a January freeze made the preceding years' numbers look artificially low in the annual reports because not everyone had completed the prior years' cases in January. Our hope is that with the April freeze the reports will reflect the entirety of the prior year cases. With the October freeze we will once again update the prior years' reports as well to get a more complete data set. Our updated registry reports are available now, with 2020 data included.

The COVID-19 pandemic has taught us the value of timely data entry as our live dashboard demonstrates. In response ELSO has shifted the deadlines according to a new schedule which can be found [here](#).

ELSO has increased our deadlines to four times a year in order to have a more complete dataset for analyses.

Quality Committee

For centers interested in applying for the Award of Excellence, the applications admissions period for 2021 closes soon - June 1, 2021. Please find our guidance document on how to have the best chance of success [here](#) (Award Evaluation & Improvement Tool). If you missed applying this year, please consider applying in 2022.

Publications Committee

ELSO's first monograph will be released in the next few months. The working title is "ECPR and Resuscitative ECMO: A Detailed Look at Emergent Extracorporeal Life Support", with editors Zach Shinar and Jenelle Badulak.

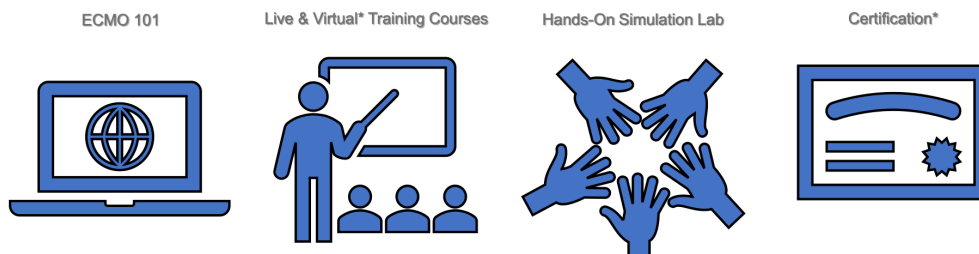
The Publications Committee has developed a matrix for all ELSO publications that describes the categories, criteria, and review process. Please contact us with any questions at publications@elso.org.

ELSO Guideline Updates

Recently published ELSO guidelines include: adult and pediatric ECPR, adult respiratory Congenital Diaphragmatic Hernia (CDH), and adult cardiac ECMO. Guidelines in development include an updated mobile ECMO transport and ECMO circuitry.

Education Committee

ELSO Academy



2021 is a big year for education! Our team is quite busy working on our new education and training courses and programs. We look forward to growing ELSO's capacity to be your partner for education and training needs.

Virtual Training

ELSO has conducted several virtual training courses throughout the pandemic and we will continue. This format allows faculty from all over the world to come together to teach students globally, while also providing more direct access for questions, nuance, and excellent discussions regarding managing difficult situations that can arise. We will announce in the second half of 2021.



Adult Self-Paced Online ECMO Course

ELSO will release an online course that is self-paced. This course is the culmination of years of work. Completion of this course or our virtual training courses qualifies an ECMO practitioner to take the individual certification exam.

ELSO Individual Certification Exam

We are in the final stages of validating our certification exam, which will be released later this year. This certification will be the global standard for ECMO practitioners.

On-Site Training Opportunities

We are working towards a November 2021 date to conduct on-site simulation training. Cannulation workshops and other opportunities will come in the first half of 2022. Course endorsement continues to be on hold. Keep track of the latest Education news [here](#).

Technology & Innovation Committee

In April, the Biomedical Advanced Research and Development Authority (BARDA) issued a request for information on anticoagulation in ECMO treatment. ELSO submitted a response, as we hope many others did as well.

ELSO continues to work with the FDA and other regulatory agencies. We have been working more closely with the FDA on statistical reporting expectations. ELSO is also expanding our statistical and analytic capacity.

Research Committee

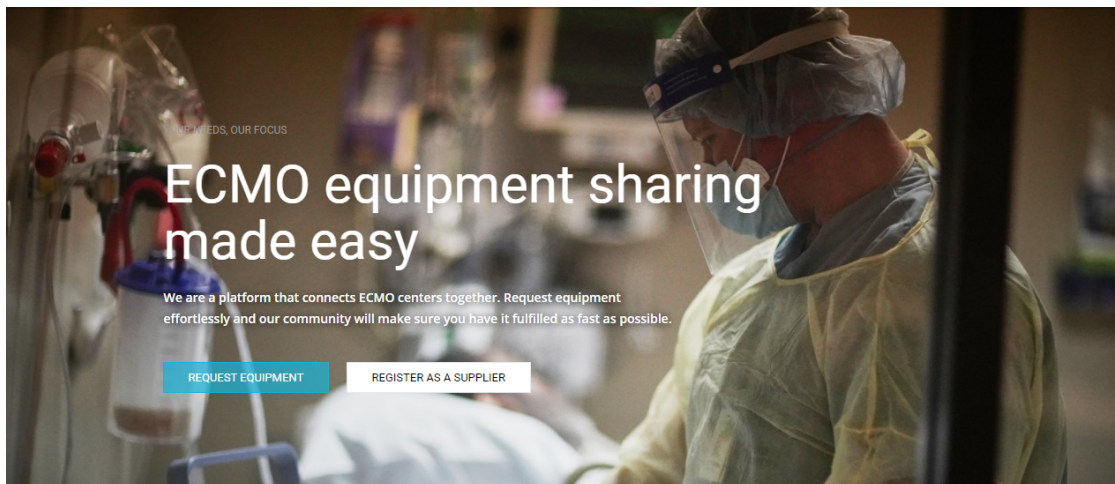
The Research Committee is interested in what webinars our ELSO community would like to hear about. This is a shared interest with education and research. Please contact us with ideas: research@elso.org.

Grant applications will be available soon.

ANNOUNCEMENTS

ELSO Supplies Exchange Released

During the pandemic, ELSO became aware of ECMO supply issues that our member centers were experiencing. We developed an equipment supplies exchange to help solve that problem for our centers. We are pleased to announce that the site is now active for ELSO centers. This is an exchange to help solve equipment issues in a crisis; it is not designed to replace your normal supply management processes. We encourage centers to register with the exchange if you are interested in participating. Go to supplies.else.org.



You never know when you might need help or could help. We will expand this service to other regions soon.

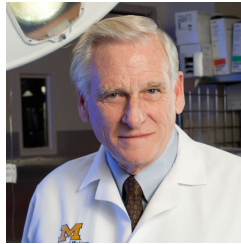
SEECMO Annual Meeting

The 31st Annual Specialist Education in Extracorporeal Membrane Oxygenation (SEECMO) will be held June 11-12, 2021. This will be a live virtual conference hosted via WebEx. Registration \$125 Register at: https://www.eeds.com/portal_live_events.aspx?ConferenceID=562040 Contact Kim Kyle: kkyle@chla.usc.edu

Research Corner

Surveys can be submitted by any ELSO Member Center. If you have a survey that you would like to share on our next newsletter, please email newsletter@else.org.

Bedside with Bartlett



*Robert Bartlett, MD
Founder, Board of Directors Emeritus, ELSO
Professor Emeritus of Surgery, University of Michigan*

Case Description

A 30 year old woman is 25 weeks pregnant with a normal pregnancy. She has developed severe viral pneumonia and now meets indications for VV-ECMO. What is the best plan regarding the pregnancy during VV-ECMO support?

Answer

There have been many ECMO cases supporting pregnant women but there is not enough experience to recommend any definitive course of action. Fetuses have developed to viable status (32 weeks) and are usually removed by cesarean section at that time. Some women have been near term on ECMO and delivered vaginally without complications. My approach in this patient would be to initiate 2-catheter venovenous access, realizing that drainage from the inferior vena cava may be difficult because of the enlarging uterus. Conversion to a double lumen catheter via the jugular vein would be desirable. At 25 weeks, delivering this fetus would result in extreme prematurity and difficult management. My approach would be to support the patient with the hope that the pregnancy will proceed normally and proceed to D&C if the fetus dies, or proceed to cesarean section delivery at 32 weeks.



The Extracorporeal Life Support Organization

Our Mission

To provide support to institutions delivering extracorporeal life support through continuing education, guidelines development, original research, publications and maintenance of a comprehensive registry of patient data.

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.

Our Vision

ELSO will be the premier organization providing education, training, research, and data management for the advancement of extracorporeal life support throughout the world.



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The Extracorporeal Life Support Organization, Incorporated
3001 Miller Road, Ann Arbor, Michigan 48103

www.elseo.org

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