



December 2018

ELSO NEWSLETTER



Happy Holidays



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ELSO Newsletter Team:

Omar Alibrahim MD
Editor

Kennethia Banks-Borden
Co-Editor

Letter from The Chair

Mark Ogino, MD- ELSO Chair

Thank you for all the wonderful messages of welcome and support. It is amazing that I have been in my role as ELSO Chair for 3 months, but even more astounding is the degree of enthusiasm I have encountered in all of our chapters. Our members from all over the globe are volunteering their time and expertise to ensure that ELSO remains the “go to” organization for anything related to ECMO. Thank you!

I would like to share with you the areas that I plan to focus my efforts during my 2-year term. I've identified three “pillars” or foundations for ELSO. Clinical Excellence, Education, and Data Resource/Research. In the future, I will report to you the work of our membership that is supporting these pillars and how they may impact you and your centers. I also have selected a personal theme of “Diversity and Inclusion” that will help guide me as I make recommendations to our Executive and Steering Committees. I would appreciate your feedback on how I am approaching my leadership responsibilities at mogino@elso.org

The 29th ELSO Conference in Scottsdale was a great success and continued to exceed expectations with more than 950 participants - the highest number of participants in the history of ELSO. Planning is ongoing for the next ELSO 2019 conference in Austin TX. This will be a special event because it will be the 30th birthday for ELSO. SWAAC ELSO in Cairo Egypt is just around the corner in January. EuroELSO in Barcelona Spain and AP ELSO in Bangkok Thailand are also being planned for 2019.

The ELSO committees and sub-committees have been busier than ever. I want to highlight that many of these committees now have representation from all of the global chapters, and with this, comes collaboration, unified visions and strength.

The new ELSO Registry Quality Reporting Platform is live and continues to generate great visual presentations to assist centers evaluate their data and outcomes. The importance of the Registry has been recognized by the FDA and this will open the door for new opportunities to partner with the FDA and industry.

The CMS controversy continues, but ELSO, partnered with the STS, has taken the lead to work with CMS and assist them with reevaluating their recent decision. Please go to ELSO.org for updates.

Thanks to everyone again for your contributions to ELSO and your local chapters. In the true spirit of the holiday season, wishing you peace, joy and a prosperous new year!!

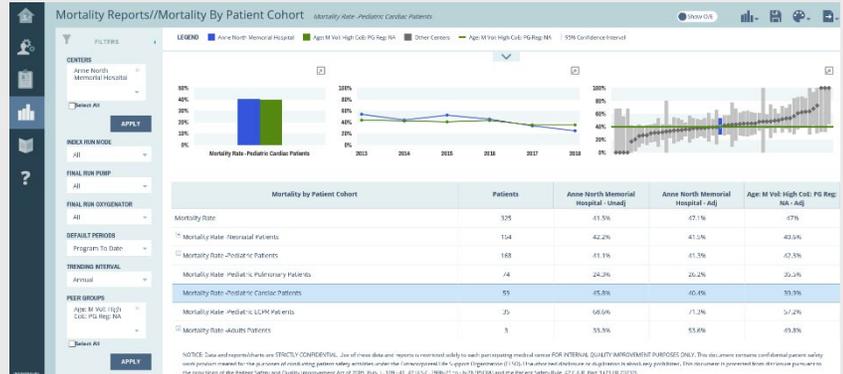
Mark Ogino MD

Committee Updates

Registry Committee:

Ryan Barbaro, MD Chair- ELSO Registry

The ELSO Registry Quality Reporting Platform has been live for nearly 4 months, and we have over **400 logins!** That is great news, but it also means many of our ELSO centers have not yet logged in. If you have not yet logged in or do not have a password, we want to help you. Please email ELSOsupport@arbormetrix.com with questions or to request a password.



The ELSO Registry has an updated website - check it out at <https://www.else.org/Registry.aspx>. The ELSO Registry is beta testing a way for centers to upload data to the ELSO Registry directly from an XML file. If you are interested in beta testing please email Elaine Cooley ecooley@else.org.

Coming in the new year we will launch a brief data entry exam. This exam is not intended to test but to educate. You cannot fail, but if a question is answered incorrectly, an explanation is given to explain the correct response. The data entry exam will be mandatory for new centers and centers wanting to use the XML file upload system, but we encourage all centers to check it out in 2019.

The deadline to enter your ELSO data is January 21st, 2019. All ECMO runs submitted on or before January 21st will be included in the January summaries.

Guidelines & Protocols Committee:

Lakshmi Raman, MD Chair- Guidelines & Protocol Committee

Guidelines committee is working on updating the existing guidelines. Teams with international representation have been identified to help move forward. The website will be updated with the new guidelines in the spring of 2019.

Conference Committee:

Katarzyna (Kasia) Hryniewicz, MD Chair- Conference Committee

The 29th ELSO Conference in Scottsdale, AZ was a great success. We had the highest number of participants in the history of ELSO and introduced new sessions such as mini oral sessions and the heart lab. Our multidisciplinary committee that includes Perfusionist, RT, APRN and physicians is deep into planning our 30th ELSO conference which will take place on Austin, TX. Hope to see you next year!!



Logistics & Education Committee:

Bishoy Zakhary, MD Chair- ELSO Logistics & Education

The education committee has had a busy couple of months! We are preparing for a new workshop in conjunction with SCCM - *Advanced VV ECMO* February 15-16 in San Diego. We will be discussing ventilator management, ECMO as bridge-to-transplant, ECCO2R, and other challenging concepts. Details at ELSO.org.



The international ECMOed Taskforce recently had their second meeting in Doha, Qatar. The meeting focused on identifying international ECMO educational needs and discussing mechanisms for collaboration and standardization. Developing an ECMO curriculum, expanding ECMO educational resources and reach, and entering the online space were among the priorities identified.

The recently developed and highly successful hands-on *Cannulation Workshop* dates have been finalized. The dates are May 15th, 16, and 17th, 2019. This workshop will take place in Atlanta, GA at the Emory Conference Hotel. Registration is scheduled to open on January 8th, 2019. Please contact Kennethia Banks-Borden at kbb@elso.org for more information or to be placed on the notification list.

Technology Committee:

Johnathan Haft, MD Chair- ELSO Technology Committee



The Technology Committee has been working on a number of activities. The first relates to the recent CMS coverage decision for Medicare and Medicaid beneficiaries which reduces payment for ECMO patients that are cannulated peripherally. In partnership with other relevant professional societies, we have submitted a Comment Letter to CMS that articulates our claim that cannulation site does not correlate with patient acuity or hospital cost of care. We are currently awaiting a response from CMS. Our group is also working jointly with the Registry Committee on a number of important initiatives to improve the way that the Registry can provide useful information about ECMO related devices. A number of proposals are under consideration to incorporate device additions, deletions, and failures during the course of an ECMO run. While this may require additional effort during registry submissions, we feel this data will be essential to our understanding of device effectiveness in the setting of prolonged support. The Device Development Group is working directly with industry partners and the FDA as these changes may create an opportunity for Registry to be used for FDA device clearance. Lastly, we are exploring a digital platform to leverage the GUDID symbol on every disposable device used for ECMO as part of Registry submission. This would improve accuracy and add granularity to our data and could potentially make submissions more user friendly. More to come!

Center of Excellence Committee:

Tracy Morrison, RN Co-Chair for ELSO COE & ELSO Nursing Liaison

The ELSO Award of Excellence in Life Support 2019 application is now open for submission! The submission period is between 10/15/2018 - 3/1/2019. You can start your application now and continue to edit until 3/1/2019. At 2359 EST the application will lock and you will no longer be able to edit or submit your application.

COE committee updates continue....

Centers wishing to receive the Award of Excellence at the 2019 EUROELSO conference in Barcelona should submit their applications by 2/1/2019 to ensure time for review of the application prior to the conference. Applications submitted for EURO ELSO conference presentation between 2/1/2019 and 3/1/2019 may be reviewed prior to the conference if time allows, but may not receive their plaque at the meeting due to time constraints.

Award of Excellence designees may be asked to present their work at an ELSO conference for the poster session! This is a great way to honor both your team and the excellent work you are doing to improve the quality and safety of ECMO patients.

Communication Committee:

Thomas Brogan, MD Chair- ELSO Communication Committee

The Communication Committee is proud to announce the release of the 4th Edition of the “ECMO Specialist Training Manual” which premiered at the ELSO Meeting in Scottsdale in September. In addition, the Spanish translation of the 4th Edition of the ECMO Red Book (Extracorporeal Cardiopulmonary Support in Critical Care) was released this summer as an electronic book. The book is available at the ELSO website. We are working on preparing an electronic version of the 5th Edition of Red Book (released in May 2017).

Currently we are working on translating the 4th Edition of the “ECMO Specialist Training Manual” and the 5th Edition of the ECMO Red Book into Spanish.

The newsletter is being headed up by Omar Alibrahim MD. If you have any inclusions, please write to Omar.

Velia Antonini and Justyna Swol are leading the Social Media Subcommittee. They are posting on Facebook and Twitter and we are trying to recruit ELSO members to contribute to the subcommittee in reviewing potential posts.

Announcements:

Newly Elected ELSO Steering Committee Members

We want to congratulate the newest members of the ELSO Steering Committee! Terms of service will begin September 2018 at the 29th Annual ELSO Conference in Scottsdale, AZ.

Chair - Mark Ogino, MD

Chair-Elect - Matt Paden, MD

Education Chair - Bishoy Zakhary, MD

Protocols Chair - Lakshmi Ramen, MD

Technology Chair - Jonathan Haft, MD

Coordinator Representative - Guillermo Herrera, MBA, RRT-NPS

Member-at-Large - Darryl Abrams, MD

Thank you Dr. Fortenberry, Dr. Conrad, Dr. Annich, Dr. Agerstrand, Mr. Oldenberg, Mr. Toomasian and Mr. Charette for your dedication and commitment serving on the ELSO steering committee.

Adult ECMO Transport Work Group

Erin August, RN, BSN & Cara Agerstrand, MD

The Adult Transport Work Group will again be looking to communicate with those who are interested in this work group. This work group will be a collaborative effort on a global basis as we continue to move forward with finding the most innovative and effective ways to reach those in need of ECMO therapy and care within an ECMO center.

For those interested in learning more about the workgroup, please feel free to contact Erin August at eaugust@mhs.net or Kennethia Banks-Borden at kbanksborden@elso.org

Research Runway

Grant, Grants and more Grants!!

Lakshmi Raman, MD & Gail Annich, MD Chair- ELSO Grant Review Committee

ELSO 2019 Research Grants are in review and applicants will be notified early 2019!



Gail Annich, MD
ELSO Protocols Committee Co-Chair
ELSO Grant Review Committee Chair

Peta Alexander, MD
ELSO Grant Review Committee Member

Roberto Lorusso, MD
Euro-ELSO Steering Committee Member

Robert Bartlett, MD
UM Liaison

Matt Paden, MD
ELSO Grant Review Committee Member

Graeme MacLaren, MD
ELSO Steering Committee Member

Dan Brodie, MD
ELSO Treasurer

Ryan Barbaro, MD
ELSO Registry Committee Chairman

Center Membership

ELSO Center Renewal Information. All center registration is currently online through our website. For centers who joined prior to January 2018 all memberships were on calendar year and will expire December 31st. Renewal is required prior to your center membership expiration. If your center becomes inactive you will only be allowed to renew after logging into our website. You will not be able to access the data entry system, discussion board, etc. At this point there will be a late fee associated with the renewal as well.

Multiple emails for 2019 dues have been sent to all center directors and coordinators reminding them to renew prior to December 31, 2018! If you have recently joined ELSO your membership will expire one year after you joined and emails will be timed appropriate.

Upcoming ELSO Conferences:

SWAAC ELSO 2019 | Grand Nile Tower Hotel, Cairo, Egypt

Location: Grand Nile Tower Hotel, Cairo, Egypt

01/15/2019 - 01/19/2019

<http://www.swaaacelso2019.com>

Dr. Akram bdelbary +20-12-211625 52 info@swaaacelso2019.com

EuroELSO 2019 | SAVE THE DATE

Location: Barcelona, Spain

04/10/2019 - 04/13/2019

<https://www.euroelso-congress.com>

Congress and Exhibition office Interplan AG Euroelso2019@interplan.de +49-40-325092 51

SEECMO 2019 | Johns Hopkins All Children's Hospital St. Petersburg, Florida

Location: Johns Hopkins All Children's Hospital

05/03/2019 - 05/05/2019

Joy Perkins 727-767-3587 jperki12@jhmi.edu

30th Annual ELSO Conference | Hilton Austin Hotel

Location: Austin, Texas

09/12/2019 - 09/15/2019

Kennethia Banks-Borden or Peter Rycus 734-998-6600 kbanksborden@elso.org

Upcoming 2019 ELSO & ELSO Endorsed Courses & Workshops:

Advanced Respiratory Failure workshop | Wyndham San Diego Bayside

Location: San Diego, CA

02/15/2019 - 02/16/2019

Kennethia Banks-Borden 734-998-6600 Kbanksborden@elso.org

[Registration Now Open!!](#)

Dallas 3 day ECMO course (ELSO Endorsed)

Location: University of Texas Southwestern Medical Center

03/25/2019 - 03/27/2019

Donna Taylor 2144568445 donna.taylor@childrens.com

[Register Now!](#)

Extracorporeal Life Support in Adult Critical Care | Emory Conference Center

Location: Atlanta, GA

04/10/2019 - 04/13/2019

Kennethia Banks-Borden 734-998-6600 Kbanksborden@elso.org

Registration Begins: January 8, 2019

Extracorporeal Life Support Cannulation Workshop | Emory Conference Center

Location: Atlanta, GA

05/15, 16 & 17/2019

Kennethia Banks-Borden 734-998-6600 Kbanksborden@elso.org

Registration Begins: January 8, 2019

Extracorporeal Life Support in Adult Critical Care | Emory Conference Center

Location: Atlanta, GA 11/06/2019 - 11/09/2019

Kennethia Banks-Borden 734-998-6600 Kbanksborden@elso.org

Please check
out our website
for all ELSO &
Non-ELSO
Information!

[CLICK HERE!](#)

Bedside with Bartlett

Robert Bartlett, MD Founder-ELSO, UM Liaison

A ECMO center has been managing systemic anticoagulation using heparin. They have been titrating heparin dose based on activated clotting time, or partial thromboplastin time (PTT), or anti Xa levels. Recently, the hospital decided that anti Xa is the way the hospital laboratory will measure heparin in the blood. They measure antithrombin 3(AT3) from time to time and treat it with recombinant antithrombin whenever the level falls below 50%. The literature is confusing. They seem to have the same level of bleeding and clotting issues as we did years ago before anti Xa and AT3, but the expense of all this monitoring has become very high. What is the best way to solve this problem?



DR. BARTLETT IS CONSIDERED BY MANY TO BE THE "FATHER" OF ECMO. HE HAS A VAST AMOUNT OF EXPERIENCE AND HAS FACED MANY CRITICAL SITUATIONS AND DECISIONS. IN THIS NEWSLETTER SERIES, HE WILL JOIN US ON ECMO ROUNDS AT THE BEDSIDE.

This answer is simple. Switch to direct thrombin inhibitors as the primary anticoagulant. You probably already have this protocol established for patients who have heparin induced thrombocytopenia (HIT). Many centers are now using argatroban or bivalirudin as their primary anticoagulant. The bleeding and clotting complications are the same or less than when using heparin. Although the DTIs are more expensive than heparin, the overall expense is less (especially if one bleeding or clotting complication is avoided). The dose is titrated to a target level of anticoagulation using ACT or PTT, but there are more variables than the anticoagulant dose.

Titration of anticoagulant dose during ECMO is based on many things. We measure how long it takes the blood to clot in response to standard activators (kaolin for ACT or TEG, thromboplastin for aPTT). If the clotting time is shorter or longer than the target, what is the reason? Is it caused by platelet count and function, renal function, diuresis, liver function, transfusion effect, lysis and fibrin split products, the dose of anticoagulant? Using heparin adds the variables of AT3 and HIT. Titration of the dose of anticoagulant requires consideration of all these variables. If the ACT or PTT is prolonged because of fibrinolysis, for example, decreasing the anticoagulant dose may make fibrin formation and lysis worse. So managing anticoagulation during ECMO requires clinical judgement. based on many factors, one of which is the dose of anticoagulant. It is a little easier with DTIs than heparin.

Is there a question or clinical situation that you would like to ask Dr. Bartlett? Please Send your question to: newsletter@elso.org

**Online Survey!
Tell us what you
think!!**

Survey Alley

A Survey of ECMO Cannulation Practices and Strategies

The ECMO team at the University of Virginia is conducting a study on cannulation strategies and practices for ECMO. We have constructed a brief survey in order to better understand practices at other institutions in order to identify commonalities and areas with significant variability. The survey is anonymous, and any feedback provided will be used to help inform future research and development of the field.

Please only complete this if you are the ECMO program director or completing on behalf of the ECMO program director. It is important that only one person from each center completes the survey. Your contributions are greatly valued. Thank you for your time and consideration.

If you are interested in participating, please complete the brief survey (<5 minutes) by accessing the link:
Link to the Survey: https://virginia.az1.qualtrics.com/jfe/form/SV_1TfgsMAD99vskE5
Estimated time for completion: Less than 5 minutes.

For more information please contact: Nicholas Teman, MD (NRT4C@hscmail.mcc.virginia.edu)
IRB SBS # 2018-0258-00 **Principal Investigator:** Nicholas Teman, MD

Sedation/Analgesia Survey

In 2017, opioid related deaths in the US exceeded global ECMO runs 5 fold. We are aware of efforts toward early extubation and non-opioid pain management beginning in the 2010s. This international survey of sedation and analgesia during ECMO is an extension of a survey conducted 8 years ago by Buscher et al. and will serve as a snapshot of current practices. This short multiple-choice survey takes less than 10 minutes to complete and may be completed anonymously.

<https://www.surveymonkey.com/r/G56Y8DT>

The University of Kentucky College of Medicine.
Vanessa Bazan **Principal Investigator:** Dr. Joseph B. Zwischenberger

Survey of informed consent practices amongst neonatal and pediatric ECMO providers

This is a research recruitment post looking for pediatric and neonatal ECMO program directors who are interested in sharing their experiences regarding the informed consent process as it relates to ECMO. ECMO is an intervention that represents a unique challenge to the informed consent process because it is complex, often emergent, fraught with possible complications, and a potentially lengthy treatment despite what is often a relatively short consent process. Due to these challenges, it is difficult to know whether the consent process that is being employed is consistent with the current established goals of informed consent. This study looks to establish an understanding of the current informed consent practices for ECMO amongst pediatric, neonatal, and pediatric cardiac critical care programs.

The purpose of this survey is for research, and your participation is entirely voluntary. Completion of the survey implies your consent. The survey responses are entirely confidential; investigators do not have access to your email or any identifying information unless it is provided by you. All responses that are collected will be anonymous, confidential, and housed in a secure manner.

To participate, please click the following link to proceed to the survey website.
<https://redcap.choa.org/redcap/surveys/?s=H8LP4CAWW7>

Please feel free to contact Megan Land, at meland@emory.edu, at any time should you have questions or concerns.

Coordinator's Corner

Guillermo Herrera, MBA, RRT-NPS - ELSO Coordinator's Representative

The next Coordinator's meeting will take place at The Children's National 35th Annual Symposium on February 24th in Keystone, Colorado. We hope to discuss the needs of the community and how we plan to approach various tasks. All coordinators, please be on the lookout for a survey that will help us fully understand the needs of our peers! We hope to break this down for a meaningful presentation and I hope to see you all in Keystone. If you are wishing to get involved with the ELSO Coordinator's work group please send all inquiries to Guillermo Herrera at gherrera@childrensnational.org



Hot Topics/Discussions

Timothy Maul, PhD, CCP

CLICK TO
[Join the Discussion!](#)

Tis the Season for ECMO

As we close out another year, we hope you can find some time amongst your busy holiday shopping to hop in your sleigh and stop by the Discussion Board. We have some topics that are hotter than a yule log. Make someone's season bright by lending your experience to your fellow ECMO-logists.

Discussion Board Topics of the Month

Here are some of the hot topics to ring in the new year with:

- [How Long Do You Leave your Circuit Primed?](#) This has become a perennial question for centers, new and old, as we deal with the ebb and flow of ECMO.
- [ECMO Family Handbook](#). Do you have a handy pamphlet or family guide that you can share with your fellow ECMO community?
- [Staffing Models](#). Are you being asked to do more with less? How are you managing in the face of staffing shortages?

Discussion Board Contributor of the Month

Congratulations Douglas Kirk from Mercy Hospital Springfield for being our Discussion Board Contributor of the Month! Keep sharing your experience!



BECOME A MEMBER

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<https://www.else.org/AboutUs/JoinELSO.aspx>

Shop all ELSO!

Benefits for ELSO Individual Memberships:

- ✚ Direct participation in the world's largest ECMO community
- ✚ ELSO Member Newsletters and ELSO Registry Data Reports
- ✚ Discounts on one copy of the ELSO Red Book (\$20 off list price) and one copy of the ECMO Specialist Manual (\$5 off)
- ✚ \$50 discount on the Annual ELSO Conference Registration fee (main conference only)
- ✚ Official Certificate of ELSO Membership
- ✚ Discounted registration rates for global ELSO Chapter Conferences (EuroELSO, Asia-Pacific ELSO, Latin-America ELSO, South & West Asia ELSO)
- ✚ Access to the ELSO Online Discussion Board
- ✚ Access to ELSO Online ECMO Knowledge Assessment Examination (Certificate of Completion included upon successful completion)
- ✚ Eligibility to participate in ELSO Committees and Working groups

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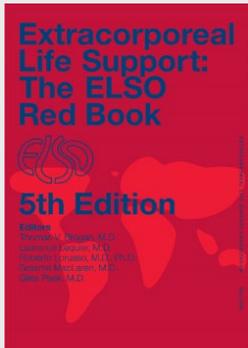
- ✚ Direct participation in the world's largest ECMO community
- ✚ ELSO Member Newsletters and ELSO Registry Data Reports
- ✚ Admission to the Members-Only Business Meeting at the Annual ELSO Conference
- ✚ Access to the ELSO Online Discussion Board
- ✚ Access to ELSO Online ECMO Knowledge Assessment Examination (Certificate of Completion included upon successful completion)
- ✚ Eligibility to participate in ELSO Committees and Working groups
- ✚ Access to ELSO website for 5 center members
- ✚ Inclusion in the directory and center maps on the ELSO website

ELSO Corporate Membership include:

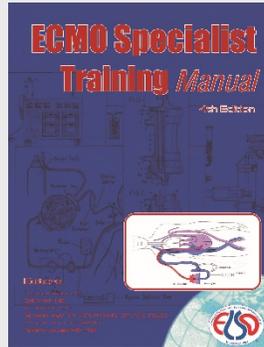
- ✚ Direct participation in the world's largest ECMO community
- ✚ ELSO Member Newsletters and ELSO Registry Data Reports
- ✚ Official Certificate of ELSO Membership
- ✚ Access to a the ELSO Online Discussion Board
- ✚ Access to ELSO website for 5 corporate members
- ✚ Recognition on the ELSO website with corporate summary and contact information
- ✚ Ability to share important information in the ELSO Newsletter

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www.facebook.com/EuroELSO



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