



# ELSO NEWSLETTER

June 2018  
Vol 1, Issue 1



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### Letter from the President

David Michael McMullan, MD

You may have noticed a new look of our ELSO newsletter. We have created a variety of changes as we work to enhance our communication with you, our ELSO membership. In another transition, we take the opportunity to thank Joel Davis RRT, Advanced Technologies Coordinator at Children's Healthcare of Atlanta and Emory University ECMO Center. Joel, together with Kennethia Banks-Borden with ELSO, relaunched our ELSO newsletter several years ago, increasing flow, consistency and value and vibrancy of information to you. ELSO thanks Joel for his incredible work as he steps down as Editor. Dr Omar Alibrahim, ECMO Program Director at John R. Oishei Children's Hospital (Buffalo, NY) has agreed to take on the Editor mantle. Omar welcomes involvement and contributions from our membership!

ELSO activities have gone into full swing this summer. The latest Registry forms are in place and working well. Soon the on-line, in time Registry reporting will be available to each member center. The Technology Committee's Device Development Group is underway, bringing together ELSO clinicians, industry, FDA, and patients to guide device development. The next edition of the Specialist Manual will be published this fall. Most of the ELSO patient care guidelines have been updated and are on the web site. The next adult respiratory failure ECMO simulation course is in Philadelphia August 21-25. The nominations committee is developing the slate on new committee chairs and Steering committee members. The annual meeting (now called the North American ELSO Conference) will be held in Scottsdale September 12-15. An exciting program is planned.

ELSO continues to explode internationally. The EuroELSO chapter conference in Prague last month was very successful. Over 1600 ecmologists attended! The results of the EOLIA trial were presented with a clear advantage for early ECMO compared to conventional care with late rescue ECMO in ARDS. APELSO joined the Chinese Society of Extracorporeal Life Support at their 2<sup>nd</sup> Annual meeting in Beijing with over 1300 in attendance. The LAELSO chapter meeting will be meeting in Santiago Chile November 11-13. SWAC ESLO is now known SWAAC, welcoming Africa into their chapter!

#### ELSO Newsletter team:

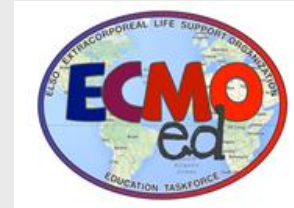
Omar Alibrahim, MD - Editor

Kennethia Banks-Borden - Co-editor

## Committee Updates

### Logistics & Education Committee:

Bishoy Zakhary, MD Chair- ELSO Logistics & Education



The ELSO Adult ECMO Management Course in Atlanta was held 4/11-14. The course was fully attended and was a big success with excellent feedback regarding the simulation-based curriculum.

The inaugural meeting of the ELSO Education Taskforce, now known as ECMOed, was held April 15-17 in Santiago, Chile. 29 ECMO education experts representing all five ELSO chapters attended the meeting to discuss the state of ECMO education and identify opportunities for international collaboration and standardization. Recommendations regarding seven major areas of ECMO education are forthcoming.

We are pleased to announce a new workshop that is now being offered through ELSO. The Cannulation Workshop (held in Atlanta 9/06, 09/07, and 09/08) is a 1-day workshop that teaches ultrasound-guided ECMO cannulation. Participants will work with a cannulation-simulator and perform percutaneous veno-venous, veno-arterial, and bi-caval ECMO cannulations.

### Conference Committee:

Katarzyna (Kasia) Hryniewicz, MD Chair- Conference Committee

Join us for the pre-conference “ECMO Made Easy!” beginning Thursday, September 13th, at 1:00 PM, through noon Friday, September 14th. The pre-conference will focus on basic and advanced topics related to ECMO indications and management. There will also be a cannulation workshop and a breakout session focusing on patient management that is geared towards RNs, perfusionists and ECMO specialists. You will learn how to start an ECMO program, how to organize your simulations, and how to handle ECMO emergencies.

The main conference will begin at 1:00 PM Friday, September 14th ending Sunday, September 16th at noon.

Dr. Jean-Louis Vincent, the world expert on sepsis, will be our keynote speaker and will kick off the Main Conference. Research updates, ECPR, long term lung support, challenging cases and many more exciting topics!

**New this year** - mentoring sessions for young physicians and ECMO specialists and a heart lab with hands on experience with limited spots available (separate fee will apply)! [Register Now](#)

### 29th Annual ELSO Conference 2018



The Westin Kierland Resort and Spa, Scottsdale, Arizona <http://www.cvent.com/d/dtqvlh>



**Technology Committee:**

John Toomasian, CCP Chair- ELSO Technology Committee

The Technology Committee has interacted closely with the Registry committee to update the current device list in the Registry. People may have noticed that there are more choices of new devices on the Registry's pull down menu as well as the introduction of reporting the heat exchange water units. If there are devices not on that list, any one is welcome to send anything missing to us, so they can be incorporated into the Registry.

The Technology Committee is in the early stages of organizing a subcommittee which will be called the Device Development Group. This grouping will incorporate members from Industry and ELSO in conjunction with governmental agencies to work together and perhaps develop strategies for submission of new devices for clinical use. The premise of this relates to use of the ELSO data Registry. Currently, most all of the devices used for ECLS are used off label. The government is hoping that these devices will eventually be reclassified. This will likely be a complex process in which the ultimate goal is to help define certain testing and experimental criteria for new devices to come to market. Historically the Registry's data was used to support the application of one device for clinical use.

**Guideline Committee:**

Steven Conrad, MD Co-Chair- ELSO Protocols Committee

The the ELSO position paper on nomenclature has been accepted for publication. This could be an important paper in standardizing ECMO terminology and abbreviations around the world. Please click the link below to review Abstract.

<https://www.atsjournals.org/doi/abs/10.1164/rccm.201710-2130CP>

**Center of Excellence:**

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

The ELSO Award for Excellence in Life Support scoring committee met at the end of March in Dayton, Ohio to review 29 applications for the Award of Excellence and 6 applications for the Path to Excellence. Once the scoring process was completed, random numbers were drawn to select 4 centers to participate in a site visit to validate their application. Two site visits have been conducted at this point with 2 more visits to occur in June. Feedback from the centers visited has been great! Once the last two site visits are completed, notification of the award results will be communicated to all applying centers by July 15, 2018.

### Upcoming ELSO Conferences:

- **29th Annual ELSO Conference** | The Westin Kierland Resort and Spa  
Scottsdale, Arizona  
09/13/2018 - 09/16/2018  
<http://www.cvent.com/d/dtqvlh>  
Kennethia Banks-Borden or Peter Rycus 734-998-6600  
[kbanksborden@elso.org](mailto:kbanksborden@elso.org)
- **ELSO LA CONFERENCE** | Santiago Chile  
11/10/2018 - 11/12/2018  
Andrea Fernandez [Andrea@ecls.cl](mailto:Andrea@ecls.cl)

### Upcoming ELSO Courses & Workshops:

- **APELSO Adult ECMO Training Course 2018** | Hong Kong  
07/09/2018 - 07/13/2018  
<https://goo.gl/forms/1cBg4uIXrPasPd953>  
Deadline: 3 June 2018  
Peter Lai [lck230@ha.org.hk](mailto:lck230@ha.org.hk)
- **ELSO / STS ECMO Symposium** | Tampa, FL  
07/13/2018 - 07/15/2018  
<http://www.sts.org/meetings/calendar-of-events/ecmo-symposium>  
Michelle Taylor 312-202-5864 [mtaylor@sts.org](mailto:mtaylor@sts.org)
- **Extracorporeal Life Support in Adult Critical Care** | Thomas Jefferson University  
Philadelphia, PA  
08/22/2018 - 08/25/2018  
<https://www.elso.org/Membership/Courses/August2018Philly.aspx>  
Kennethia Banks-Borden 734-998-6600 [kbanksborden@elso.org](mailto:kbanksborden@elso.org)
- **ELSO Cannulation Workshop** | Emory Conference Center, Atlanta, GA  
09/06/2018 - 09/08/2018  
<https://www.elso.org/Membership/Courses/September2018Cannulation.aspx>  
Kennethia Banks-Borden 734-998-6600 [kbanksborden@elso.org](mailto:kbanksborden@elso.org)
- **Extracorporeal Life Support in Adult Critical Care** | Emory Conference Center,  
Atlanta GA  
11/07/2018 - 11/10/2018  
Kennethia Banks-Borden 734-998-6600 [kbanksborden@elso.org](mailto:kbanksborden@elso.org)

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*ELSO Annual Conference!!  
Calling for all Abstracts!!*

*Deadline:*

*July 15, 2018*

*[Click here for information!](#)*

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

*[CLICK HERE!](#)*

## Bedside with Bartlett

Robert Bartlett, MD Founder-ELSO, UM Liaison

A 12-year-old child with severe viral plus MRSA pneumonia has been on VV ECMO support for 4 days. The sedation has been carefully managed and the patient is alert and awake at high VV ECMO flow. There is no tidal volume and the lungs are totally consolidated. At ECMO conferences we heard that these patients can be managed awake and can be extubated. However, we are concerned that if there were a sudden problem, it would be difficult to reintubate that patient. What is the best access to the airway?



This patient could be extubated. There appears to be little if any benefit to maintaining positive airway pressure or “recruitment” when the lungs are totally consolidated. Waiting until the lung recovers may require weeks of support. Avoiding endotracheal intubation to make the patient comfortable and avoid new nosocomial pneumonia is a worthwhile goal. However, airway access is needed if there is a circuit emergency, for procedures like bronchoscopy or lavage, or when weaning from ECMO. A good option is tracheostomy. This would be the best solution for this patient although there is always a risk of bleeding with any procedure on ECMO, including tracheostomy. We favor tracheostomy early in the course, using minimal but thorough direct exposure (not “percutaneous”) with extensive use of cautery and placement of a tracheostomy tube over a wire placed under direct vision by bronchoscopy. Any postoperative bleeding should always be managed by immediate re-exploration to control small bleeders which will inevitably occur when the fibrinolytic system is activated a few days after operation. This child is 12 years old so we would not expect any long term complications from tracheostomy. However, in infants and small children, tracheostomy may cause subglottic tracheal stenosis. We usually consider the long term risk of tracheostomy to be minimal over the age of about 6.

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



## Research Runway

### Grant, Grants and more Grants!!

Gail Annich, MD Chair- ELSO Grant Review Committee

This year the Grant Review Committee reviewed 17 grants submissions from North America, South America, Australia, and China. Forty thousand dollars in grant funding was awarded and divided between 8 grant applications. The grants awarded ranged from research on the use of direct thrombin inhibitors for anticoagulation during ECLS, surface bacterial biofilm characterization, pharmacokinetics of antibiotics on ECMO, and several on outcome and survival. The studies were mix between adult and pediatric populations. We are looking forward to the research results of these awards and their presentation at future ELSO Meetings. Call for grant applications will resume in the fall of 2018. Thanks to the members of the Grant Review Committee who commit time to reviewing all of the submissions.

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

## Survey Alley

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

### Please participate in our survey about weaning VA ECMO in children!

Weaning podiatric patients from ECMO is usually a complex process that requires a transition from ECMO support to separation from ECMO. There are a number of reports for adult patients identifying predictors of successful weaning. For paediatric patients there are only very few reports weaning ECMO, predictors of successful weaning, and which technique of weaning to use. Therefore, weaning ECMO is currently more an art than a science. Given the lack of evidence in this domain we would like to conduct this survey, which will identify the techniques most commonly used for weaning ECMO in children. We feel this will give the PICU community a clearer picture what techniques should be used, and which ones are successful.

We would greatly appreciate if you could participate in this survey! Please follow the link here:  
<https://www.surveymzmo.com/s3/4288633/Weaning-VA-ECMO-in-Pediatric-Patients>

Adrian C Mattke, MD; Prem Venugopal, MD; Emma Haisz, RN

Survey continued....

### Variations in Practice and Management of ECMO Across the World

"On behalf of Children's Health Care of Atlanta / Emory University, Atlanta, USA we would like to invite you to participate in a research project assessing the variation in practice across multiple ECMO centers around the world.

Utilization of ECMO is growing and adoption and indications are evolving quickly. However, there appears to be subtle as well as important variation in the practice and application of ECMO. The objectives of this project are to identify these variations in practice and to guide future research on how this variability influences the outcomes in patients requiring ECMO to inform best practices.

Your participation will include completing a short questionnaire, estimated to take 20 minutes. The questionnaire is linked herewith. As a humble compensation for your help, you will receive a \$50 gift card upon completion of the survey. The survey will be completely anonymous from data standpoint and the data will only be used for academic purpose.

For any queries or suggestions, please don't hesitate to get in touch

Link to the Questionnaire: <https://goo.gl/forms/p5hkuXbk9lzt1gY52>

Thank you,  
Shri Deshpande, MD MS; Summer Mackisack  
Children's Healthcare of Atlanta

### Neuromonitoring Protocols of Pediatric ECMO

Although over 26,000 newborns have been treated with ECMO since 1975 and survival rates have improved, intracranial injuries remain a major complication. Despite a high frequency of abnormalities identified on neuroimaging, there appears to be little standardization of neuromonitoring protocols during or after treatment (Van Heijst 2014).

We are surveying all ELSO pediatric programs to determine the landscape of clinical practice utilizing neurological testing in this patient population. The following anonymous survey will take **no more than 5 minutes to complete** and we greatly appreciate your participation in this research project. Survey Link: [https://cumc.co1.qualtrics.com/jfe/form/SV\\_6P6VqJWz8cBwAnj](https://cumc.co1.qualtrics.com/jfe/form/SV_6P6VqJWz8cBwAnj)

This survey has been approved by our institutions IRB and does not include identifiers for your institution.

For further info, please contact the primary investigator of this study:

Jennifer Bain, MD PhD, Assistant Professor  
Child Neurology, Neurological Institute of New York

[CLICK TO  
Join the Discussion!](#)

## Hot Topics/Discussions

Timothy Maul, PhD, CCP

### Spring into the Discussion!

The expansion of the ECMO community is evident in the number of posts from new program coordinators and existing centers taking on new patient populations. Stop by and share your experience; who know, you might learn something new, too!

### Discussion Board Topics of the Month

These are the hottest topics. Stop by and provide your input!

**ECMO Parent Handbook:** Lots of centers are interested in creating family handbooks/brochures to help them understand ECMO. Please share your center's brochure to help.

**ECMO Billing:** How are folks capturing charges for ECMO patients? This is an important topic that can help sustain ECMO programs and ensure that you are receiving the appropriate resources from your administrations.

**Medications into the Circuit:** Where are you infusing medications? What medications will you not infuse? Have you noticed different effects depending on the ECMO type (VA vs. VV)?

### Discussion Board Contributor of the Month

Congratulations David Hebert, RRT from Children's Hospital New Orleans for being our Discussion Board Contributor of the Month! Keep sharing your experience!

**Off-Line Discussions:** To keep the Discussion Board an open and collaborative group, we ask that you do not take your discussions offline through posting their personal or work e-mail accounts. The Discussion Board can support file uploads so there is no need to file-share offline. Keeping the discussion online allows for new members to search the discussion board and avoid repetitive threads or posts and helps the community move forward on a continuous basis.

**Logging On:** All ELSO Member institutions have an Administrative Account for your ELSO Registry data entry. This account can create separate accounts for your local physicians and ECMO Specialists. Contact your local ECMO Coordinator to get your accounts set up! Conversely, you can sign up for an individual membership to take advantage of discounts on Red Books and ELSO Conference Registration.

## Coordinator's Corner

Erin August, RN, BSN & Cara Agerstrand, MD

### Adult ECMO Transport Work Group

Hello ELSO Member's! The Adult Transport Work Group was a subject during our breakout sessions this past annual conference. We 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](mailto:eaugust@mhs.net) or Kennethia Banks-Borden at [kbanksborden@elso.org](mailto:kbanksborden@elso.org)



## Shop ELSO!

**BECOME A MEMBER**  
Click Here to  
[Join 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)
- 10% discount on the Annual ELSO Conference Registration fee (main conference only)
- Official Certificate of ELSO Membership
- Admission to the Members-Only Business Meeting at the Annual ELSO Conference
- 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

### ELSO Center Membership include:

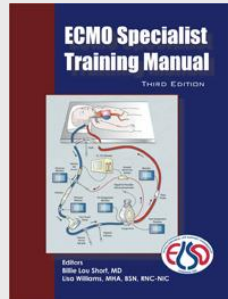
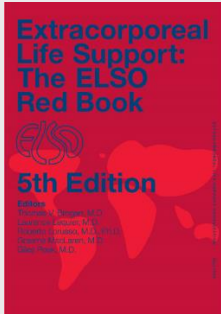
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- Eligibility to participate in ELSO Committees and Working groups
- Access to ELSO website for 5 center members
- Inclusion in the directory and center maps on the ELSO website

### 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
- Admission to the Members-Only Business Meeting at the Annual ELSO Conference
- 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

## Publications

Need a publication? Please click the images below to access order form!



## See What's Trending!!!



### Like us on Facebook!!

If you use Facebook, please visit our sites and “like” us! We intend to use Facebook as a way to present information not only ELSO members but also to anyone who is interested in our organization. [www.facebook.com/ELSO.org](http://www.facebook.com/ELSO.org)

Euro-ELSO Facebook page:  
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