## **Coordination:**

## EduCorner Programme during EuroELSO 2024 Workshon title Trainere



24 - 26 April 2024

Justyna Swol (adults) Mirjana Cvetkovic (pediatrics)

Workshop title		Trainers	Aims, goals and learning objectives	Days	Time	Room			
Bring your team to ECPR cannulation and more - Kącik Edukacyjny w języku polskim - Polish language programme							Max. students		
IHCA ECPR	Nawigacja USG w ECMO	"prime with me" – tips and tricks	Marek Dabrowski, Bartlomiej Perek, Marcin Ligowski, Jan	Następujące tematy zostaną omówione na kursie: wykonywanie kaniulacji poprzez przezskórny dostęp naczyniowy podczas resuscytacji	24 April 2024 Wednesday	13:00-14:00	2.016		
IHCA ECPR	Nawigacja USG w ECMO	"prime with me" – tips and tricks	Kaczmarek, Maciej Sip, Jaroslaw Ratkowski, Konrad	przy użyciu mechanicznego systemu wspomagania krążenia wysokiej jakości resuscytacja krążeniowo-oddechowa	24 kwietnia	14:15-15:15	2.017 2.018		
Na początku jest high-quality RKO	Transport wewnątrz- szpitalny z ECMO	Debriefing – serce symulacji	Baumgart, Sebastian Stefaniak, Mateusz Puslecki,	<ul><li>użycie mechanicznego urządzenia do kompresji klatki piersiowej</li><li>przezskórny dostęp naczyniowy (kaniulacja)</li></ul>	2024 – środa	15:45-16:45			
Na początku jest high-quality RKO	Transport wewnątrz- szpitalny z ECMO	Debriefing – serce symulacji	Malgorzata Ladzinska, Piotr Ladzinski – Poznań, Polska			17:00-18:00	max 25 students		
Exceptional ECMO simulation experience – check until you got it									
Normothermic regional perfusion in DCD donors - (un)expected challenges		Marta Velia Antonini; Cesena, Italy, Antonio Rubino, Marius	Engaging a case-based discussion on DCD organ donation and NRP, and joining a wet lab focused on NRP circuits and complications; expanding the donor pool enrolling DCD organ donors respecting country-specific	25 April 2024 Thursday	14:30-16:00	2.001			
			Berman; Cambridge, UK, Cambridge, UK, Ana Delgado; Juan Blanco-Morillo	ethical/legal boundaries; application of NRP in DCD donors in Europe; implementing a safe and effective NRP in DCD donors preventing and managing major potential clinical and mechanical complications; understand the basic concepts and ethical/legal boundaries in DCD organ donation in different European country/specific Scenarios; understand rationale, techniques and potential ethical/legal issues of NRP in DCD donors in different European country/specific scenarios; know how to prevent, recognize, and manage the major potential clinical complications of NRP; know how to prevent, recognize, and manage the major potential mechanical complications of NRP	26 April 2024 Friday	10:15-11:45	max 15 students		
Major problems - exact solutions: Trouble shooting during ECMO - Simulation of CP/pump skills - Simulation of oxygenator skills  TO BE CONTINUED ON THE NEXT PAGE			Lien Vanrijkel; Leuven, Belg. Sharon Jakobs; Antwerpen, Belgium	To cover the five troubleshooting topics according to ELSO recommendations for ECMO training.  1. Simulation of CP/pump skills a. Hand cranking b. Insufficient drainage c. Air embolism and accidental decannulation  2. Simulation of oxygenator skills a. Oxygenator failure b. Air supply failure TO BE CONTINUED ON THE NEXT PAGE	25 April 2024 Thursday	10:30-11:30 11:45-12:45 12:45-13:45 14:00-15:00	2.002		

EuroELSO/EBCP join workshop with European Board of Cardiovascular Perfusion	Luigi Camporota; London, UK	<ul> <li>1a. Understand how and when to hand crank, difference between hand crank and back up pump.</li> <li>1b. Identify air embolism and accidental decannulation and know first steps in trouble shooting.</li> <li>1c. Recognize and resolve drainage problem.</li> <li>2a. Understand how to spot and recognize the early signs of oxygenator failure.</li> <li>2b. Learn how to check the whole system, and spot the difference between air supply and oxygenator failure</li> <li>To understand bedside and advanced techniques of respiratory</li> </ul>	26 April 2024 Friday 25 April 2024	10:30-11:30 11:45-12:45 12:45-13:45 14:00-15:00	max 15 students
Dark squared discovery:  Mechanical ventilation during ECMO - Simulation of PV Loops	Domenco Grieco; Rome, Italy	monitoring and targets for lung protective ventilation: Concepts of compliance, elastance, normalized elastance and specific elastance; Driving pressure to set tidal volume; Pitfalls of driving pressure (AOP,	Thursday	11:45-12:45 12:45-13:45 14:00-15:00	2.003
- Simulation of oesophageal and transpulmonary pressure		Inspiratory time)  Simulation (1) PV Loops  - Meaning of pressure volume curve inspiratory/ expiratory): lung hysteresis  - Hysteresis to evaluate alveolar recruitment and PEEP  - Airway closure and airway opening pressure  - Recruitment-to-inflation ratio to assess recruitability  Simulation (2) Oesophageal &transpulmonary pressure  - How to measure it at the bedside: oesophageal pressure monitoring and catheter placement  - Meaning of Pes measurement: vertical gradient and transpulmonary pressure heterogeneity in the lungs: elastance-derived vs. direct methods.  - How to establish the upper limit of ventilation: elastance-derived endinspiratory transpulmonary pressure  - How to (possibly) set peep: end-expiratory transpulmonary pressure.	26 April 2024 Friday	10:30-11:30 11:45-12:45 12:45-13:45 14:00-15:00	max 15 students
Capturing on the edge: Tips and pitfalls in ultrasound guided ECMO cannulation	Tobias Wengenmayer, Dawid Staudacher, Alexander Supady, Asieb Sekandarzad Freiburg, Germany	The participants should get a good overview of the safe cannulation using ultrasound guidance with focus on the right jugular insertion of dual lumen cannula.  Demonstration, practical guidance, and simulation of ultrasound-guided cannulation for V-V and V-A ECMO with single- and double-lumen cannulae, jugular and inguinal access with focus on echocardiographic guidance and tricks for the implantation of double-lumen cannula. Criteria and requirements for successful jugular cannulation. Potential periinterventional complications will be explained and complication management will be practiced during the sessions. Finally, replacement strategies for relocation of dislocated cannulas during ongoing ECMO support will be trained. High-end simulators will allow training close to real-life conditions. All participants should be able to understand benefits, caveats, and challenges of different cannulation strategies; participants with prior experience in ECMO cannulation will be able to adopt the strategies for their clinical practice.	25 April 2024 Thursday 26 April 2024 Friday	11:45-12:45 12:45-13:45 12:45-13:45	2.004  max 15 students

Jo-anne Fowles + 4 Trainers	Through theoretical presentation and simulation provide an understanding of CRRT/plasmapheresis during ECMO  indications for connecting CRRT/plasmapheresis to the ECMO circuit  Demonstrate through simulation safe connection and disconnection  Discuss complications and challenges of different approaches.  Discuss prevention and troubleshooting of complications  Identify indications for connecting CRRT/ plasmapheresis to the ECMO circuit	25 April 2024 Thursday	10:30-11:30 11:45-12:45 12:45-13:45 14:00-15:00	2.005
	<ul> <li>Understand the complications and challenges of different approaches.</li> <li>Understand prevention and troubleshooting of complications in the clinical area</li> </ul>	26 April 2024 Friday	10:30-11:30 11:45-12:45 12:45-13:45 14:00-15:00	max 15 students
Chris Meadows, Dan Taylor, Peter Sherren, Nicholas Ioannou, Stephen Tricklebank, Kathleen Daly, Nicola Agnew, Nigel Gooby, Janine Bulmer; London, UK	Participants will achieve a greater understanding of peripheral V-A ECMO circuit anatomy including retrograde blood flow, how to run peripheral V-A ECMO safely, to recognise when complications are occurring, and how to successfully manage them. Appreciation of clinical features, recognition of complications, symptomatology, and management options.  Tutorial on complications of V-A ECMO: - Differential hypoxemia (Harlequin Syndrome): clinical features, causes,	25 April 2024 Thursday	10:30-11:30 11:45-12:45 12:45-13:45 14:00-15:00	2.006
	how to diagnose, and management options - LV distension: clinical features, causes, how to diagnose, and management options Opportunity to take part in simulation scenario to consolidate learning through direct experience and/or debriefing	26 April 2024 Friday	10:30-11:30 11:45-12:45 12:45-13:45 14:00-15:00	max 15 students
Ibrahim Fawzy Hassan, Ali Ait Hssain, Nadir Kharma, Arzak Ahmad Doha, Qatar	This workshop provides a systematic approach how to recognize patient / ECMO interactions which may lead to severe hypoxemia on V-V ECMO. This workshop entails theoretical part combined with immersive high-fidelity simulation followed by debriefing on refractory hypoxemia on V-V ECMO. To define "hypoxemia" on V-V ECMO, to review the notions of oxygen transport and oxygen delivery, to understand the physiology of	25 April 2024 Thursday	10:30-11:30 11:45-12:45 12:45-13:45 14:00-15:00	2.007
	refractory hypoxemia on V-V ECMO, to assess a patient by using a systematic approach for refractory hypoxemia, to consider all the possible aetiologies of persisting hypoxemia while on V-V ECMO, to apply all the potential interventions to correct the persisting, refractory hypoxemia	26 April 2024 Friday	10:30-11:30 11:45-12:45 12:45-13:45 14:00-15:00	max 15 students
nulation experience	- interfering with the future dreams and reality			
Richard Tallman, Dave Machin, Irada Tews, Colin Ummerle, Simon Sonntag, Moritz Jung, Hans Seiler	Immersive, three-dimensional experience of ECMO cannulation perceived through a virtual reality device and transformation into augmented reality. The user will perform an ECMO cannulation in a computer-generated ICU environment with scenes and objects that appear in a simulated 3D environment that enables users to explore and interact with a virtual surrounding in a way that approximates reality, as it is perceived through the users' senses.	25 April 2024 Thursday 26 April 2024 Friday	Both days: 10:30-11:30 11:45-12:45 12:45-13:45 14:00-15:00	2.017 - 2.018 max 25 students
	Chris Meadows, Dan Taylor, Peter Sherren, Nicholas Ioannou, Stephen Tricklebank, Kathleen Daly, Nicola Agnew, Nigel Gooby, Janine Bulmer; London, UK  Ibrahim Fawzy Hassan, Ali Ait Hssain, Nadir Kharma, Arzak Ahmad Doha, Qatar  mulation experience Richard Tallman, Dave Machin, Irada Tews, Colin Ummerle, Simon Sonntag,	understanding of CRRT/plasmapheresis during ECMO  indications for connecting CRRT/plasmapheresis to the ECMO circuit  Demonstrate through simulation safe connection and disconnection  Discuss complications and challenges of different approaches.  Discuss prevention and troubleshooting of complications  Identify indications for connecting CRRT/plasmapheresis to the ECMO circuit  Demonstrate safe connection and disconnection  Understand the complications and challenges of different approaches.  Understand prevention and troubleshooting of complications in the clinical area  Participants will achieve a greater understanding of peripheral V-A  ECMO circuit anatomy including retrograde blood flow, how to run peripheral V-A ECMO safely, to recognise when complications are occurring, and how to successfully manage them. Appreciation of clinical features, recognition of complications, symptomatology, and management options.  Tutorial on complications of V-A ECMO:  Differential hypoxemia (Harlequin Syndrome): clinical features, causes, how to diagnose, and management options  Ut distension: clinical features, causes, how to diagnose, and management options  Opportunity to take part in simulation scenario to consolidate learning through direct experience and/or debriefing  Ibrahim Fawzy Hassan, Ali Ait Hssain, Nadir Kharma, Arzak  Ahmad  Doha, Qatar  This workshop provides a systematic approach how to recognize patient / ECMO interactions which may lead to severe hypoxemia on V-V ECMO. To define "hypoxemia" on V-V ECMO, to review the notions of oxygen transport and oxygen delivery, to understand the physiology of refractory hypoxemia on V-V ECMO, to assess a patient by using a systematic approach for refractory hypoxemia, to consider all the possible actiologies of persisting hypoxemia while on V-V ECMO, to apply all the potential interventions to correct the persisting, refractory hypoxemia may be completed through a virtual reality device and transformation in a computer-generated ICU environment that enables users to	understanding of CRRT/plasmapheresis during ECMO indications for connecting CRRT/plasmapheresis to the ECMO circuit indications for connecting CRRT/plasmapheresis to the ECMO circuit indications and challenges of different approaches. indications and challenges of different approaches. indications for connecting CRRT/ plasmapheresis to the ECMO circuit inderstand the complications and challenges of different approaches. indications for connecting CRRT/ plasmapheresis to the ECMO circuit indications and troubleshooting of complications in the clinical area  Chris Meadows, Dan Taylor, Peter Sherren, Nicholas loannou, Stephen Tricklebank, Rathleen Daly, Nicola Agnew, Nigel Gooby, Janine Bulmer; London, UK  Chris Meadows, Dan Taylor, Peter Sherren, Nicholas loannou, Stephen Tricklebank, Rathleen Daly, Nicola Agnew, Nigel Gooby, Janine Bulmer; London, UK  Chris Meadows, Dan Taylor, Peter Sherren, Nicholas loannou, Stephen Tricklebank, Stephen Tr	understanding of CRRT/plasmapheresis during ECMO indications for connecting CRRT/plasmapheresis to the ECMO circuit Demonstrate through simulation safe connection and disconnection Discuss complications and challenges of different approaches. Discuss prevention and troubleshooting of complications Understand the complications and challenges of different approaches. Understand prevention and troubleshooting of complications in the clinical area Understand prevention and troubleshooting of complications in the clinical area Participants will achieve a greater understanding of peripheral V-A ECMO circuit anatomy including retrograde blood flow, how to run peripheral V-A ECMO safely, to recognise when complications are cocurring, and how to successfully manage them. Appreciation of clinical features, recognition of complications, symptomatology, and management options Utdisension: clinical features, causes, how to diagnose, and management options Utdisension: clinical features, causes, how to diagnose, and management options Opportunity to take part in simulation scenario to consolidate learning through direct experience and/or debriefing Ushahim Fawzy Hassan, Ali Ait Hssain, Nadir Kharma, Arzak Ahmad Doha, Qatar  This workshop provides a systematic approach how to recognize patient / ECMO. To define "hypoxemia" on V-V ECMO, to review the notions of oxygen transport and oxyge ndelivery, to understand the physicology of refractory hypoxemia on V-V ECMO, to assess a patient by using a systematic approact for refractory hypoxemia on V-V ECMO, to apply all the potential interventions to correct the persisting, refractory hypoxemia on V-V ECMO, to apply all the potential interventions to correct the persisting, refractory hypoxemia on V-V ECMO, to apply all the potential interventions to correct the persisting, refractory hypoxemia on V-V ECMO, to apply all the potential interventions to correct the persisting, refractory hypoxemia on V-V ECMO, to apply all the potential interventions to correct the persisting, refracto

Let's learn hemodynamic with Harvi  Session 1: (25. April) V-A ECMO and loss of pulsatility: the underlying physiology that informs management strategies with	Matteo DiNardo, Rome, Italy Marc L. Dickstein, USA	Background: Harvi is a set of online textbooks and a cardiovascular/pulmonary simulator that has been in development for over 30 years for research and education (harvi.online). The Harvi platform is currently used in an interactive program (TEACH, Training and Education in Advanced Cardiovascular Hemodynamic) for training in basic and advanced cardiac pathophysiology, Participants are encouraged to bring laptop computers and will be given detailed instructions and guided through specific scenarios to explore the hemodynamic seen in patients supported with many cannulation strategies, concurrent secondary devices, and a myriad of underlying (and rapidly changing) cardiopulmonary pathophysiologic conditions.	25 April 2024 Thursday 26 April 2024 Friday	Session 1 11:45-12:45 Session 2 12:45-13:45	2.015 - 2.016
focus on the impact of V-A ECMO on LV function and explore strategies for addressing LV distension.  Session 2: (26. April) Complex cases: BiVentricular failure and ischemic VSD: explore the physiology of complex conditions, such as biventricular failure and mechanical support for the patient with an ischemic VSD.					max 25 students
Pediatri	c ECMO adventure –	and the stars look very different today!			
ECMO in trauma	Justyna Swol, Graeme MacLaren, Mark Davidson, Malaika Mendonca, Giles Peek, Stepan Maruniak, Victoria Molyneux, Francesc Torres, Maura O'Callaghan, Mirjana Cvetkovic	competencies in managing children on ECMO, and to develop adequate multidisciplinary teamwork skills to manage children on advanced mechanical life support.  Description: This immersive hands-on workshop and high-fidelity simulation provides the latest techniques and technology surrounding the clinical use of ECMO, including novel educational models. Through various multilevel, simple, and advanced clinical scenarios, we will apply the knowledge gained in the understanding and managing children supported on ECMO utilizing high fidelity simulation mannequins and educational modalities with international, experienced facilitators.  Learning Outcomes: Upon completion of this activity, participants should be able to: recognize complications of V-V and V-A ECMO, troubleshoot routine and catastrophic ECMO events, identify and illustrate the most effective cannulation strategy, ECPR, ECMO in Trauma, ECMO and Impella, ECMO transport, ECMO in sepsis, Induction to multidisciplinary teamwork & basic pathway during ECPR, evaluate	25 April 2024 Thursday	10:30-11:30	VIP Room
VV-ECMO double site cannula insertion	Jon Lillie, Veronika Maraczi, Matteo Di Nardo, Anne Marie Guerguerian, Ryan Barbaro		25 April 2024 Thursday	11:45-12:45	VIP Room
Help! Pump failure	Lisa Carson Price, Giacomo Cavallaro, Stepan Maruniak, Jana Assy, Peter Roeleveld, Francesc Torres, Susan Lawrie Maura O'Callaghan, Mirjana Cvetkovic		25 April 2024 Thursday	12:45-13:45	VIP Room
OOH CA-ECPR – exploring the boundaries	Jan Belohlavek, Robert Jan Houmes, Chris Harvey, Lisa Carson Price, Luca Marchetto, Alvise Tosoni, Maura O'Callaghan, Mirjana Cvetkovic		25 April 2024 Thursday	14:00-15:00	VIP Room
Sepsis on ECMO	Graeme MacLaren, Anne Marie Guerguerian, Ryan Barbaro, Hwa Jin Cho, Veronika Maraczi, Ravi Thiagarajan, Lakshmi Raman, Jan Hau, Neyesan Rafat, Lisa Carson Price, Maura O'Callaghan, Mirjana Cvetkovic		26 April 2024 Friday	10:30-11:30	VIP Room
ECMO and Impella	Sebastian Tume, Brigitte Stiller, Peta Alexander, Gail Annich, Malaika Mendonca, Stepan Maruniak, Lisa Carson Price, Luca Marchetto, Alvise Tosoni, Grace Van Leeuwen, Susan Lawrie Maura O'Callaghan, Mirjana Cvetkovic	paediatricians, neonatologists, Emergency Department physicians, cardiac intensivists, ECMO specialists, surgeons, cardiologists, ICU nurses, theatre staff, trainees and other allied health care professionals looking after patients on ECMO.	26 April 2024 Friday	11:45-12:45	VIP Room

Help! Air in the ECMO circuit	Sylvia Belda, Peter Roeleveld,	26 April 2024	12:45-13:15	VIP
ricip: All ill the Leivio chedit	GiacomCavallaro, Andrea	Friday		Room
	Moscatelli, Poonam Malhotra,	,		
	Victoria Molyneux, Francesc			
	Torres, Maura O'Callaghan,			
	Mirjana Cvetkovic			
ECMO air transport	Lisa Carson Price, Lars Mikael	26 April 2024	14:00-15:00	VIP
ECMO air transport	Broman, Sylvia Belda, Chris	Friday		Room
	Harvey, Marisa Vieira, Arianne	,		
	Willems, Giacomo Cavallaro,			
	Stepan Maruniak, , Luca			
	Marchetto, Alvise Tosoni, Maura			
	O'Callaghan, Mirjana Cvetkovic			

<sup>&</sup>quot; Come with me where dreams are born, and time is never planned!" Peter Pan

Educational Corners are situated on 2<sup>nd</sup> floor backstage area



Signs will guide you to the Educational Corner's area at lobby 2

☐ Coffee will be available during all corner sessions ☐

