

9th Adult ECMO Training Course Regensburg 2024

23 September – 27 September 2024

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SPITZE IN DER MEDIZIN.
MENSCHLICH IN DER BEGEGNUNG.



ECMO-Center University Hospital Regensburg

9th ECMO Training Course Regensburg

23.09. – 27.09. 2024

Lecture Theatre A2 (Entrance West)

Dear Colleagues,

after H1N1 Influenza-A and during COVID-19, extracorporeal life support (ECLS) expanded rapidly worldwide and has now become an accepted therapeutic option for critically ill patients. We are convinced that well managed ECMO can save lives in severe circulatory and respiratory failure in all age groups. While many consider this new technology as the most important innovation in modern Intensive Care Medicine, recent randomized controlled trials also have raised new questions.

ECMO technique is complex, and patients, who need ECMO, are critically ill. To successfully use ECMO in clinical practice, training and experience are indispensable. Both the knowledge of physiology and efficiency of ECMO, but also of potential complications is needed. Selection of patients, who potentially may profit from extracorporeal support is not easy. Therefore, since 2018 we offer national and international training courses on ECMO in Regensburg. These courses have been endorsed by ELSO and received support by the German medical societies DIVI, DGfK and DGTHG.

The course will include both lectures in the morning and simulation, hands-on and discussions in the afternoon. It shall be an introduction into ECMO therapy in Critical Care today, embedded within state-of-the-art conventional treatment, which will cover both respiratory and circulatory support for adult patients. The main target audience are physicians and perfusionists involved with ECMO; for nurses a separate course is offered. A printed and electronic script in combination with the ELSO Red Book will supplement the course and allow ongoing training.

On Wednesday we again will include an Evening Symposium called "ECMO: State of the Art...", where our international faculty will present their thoughts on a topic of their choice of a specific clinical problem.

Regensburg had hosted the 4th international congress of the EuroELSO in 2015. Historically, it was an important mediaeval trading center and served as a bridge from south to north and west to east. In 2006 it was declared a World Heritage Site, and you will surely enjoy the beauty of our Old City in the evenings.

We are looking forward to cordially welcome you in Regensburg,

Thomas Müller
Dirk Lunz

Matthias Lubnow
Maik Foltan

Alois Philipp
Georg Trummer

ECMO Centers Regensburg and Freiburg



Monday, 23.09.

8:00 – 8:30		Entrance West	
		Registration	
8:30 – 8:45	<i>Müller T</i>	Lecture Theatre A2	
		Welcome and introduction	
8:45 – 9:05	<i>Müller T</i>	Basics 1: history of ECMO and ELSO	
9:10 – 9:35	<i>Philipp A</i>	Basics 2: technique of ECMO - oxygenator, pump, cannula	
9:40 – 10:00	<i>Weber-Carstens S</i>	Basics 3: Physiology of gas transfer	
10:05 – 10:30	<i>Foltan M</i>	Maintenance of oxygenator and pump, indications for exchange	
10:30 – 11:00	Coffee Break		
11:00 – 11:25	<i>Lubnow M</i>	Conventional therapy of ARDS	
11:30 – 11:55	<i>Müller T</i>	VV-ECMO in severe ARDS: indications, contra-indications, initiation	
12:00 – 12:25	<i>Malferteiner M</i>	ECCO2R in clinical practice 2024	
12:30 – 12:55	<i>Müller T</i>	Mechanical ventilation on VV-ECMO	
13:00 – 14:00	Lunch Break		
14:00 – 16:00	Kursraum 1	Kursraum 2	ICU 93/B3 or ICU 97/C4
	Group 1 Simulation Case scenarios and Trouble-Shooting <i>Malferteiner M, Heinze J, Preiss A</i>	Group 2 Management of Cannulas: tips and tricks <i>Wiest C, Lubnow M</i>	Group 3 Ward round <i>Dietl A, Müller T, Lunz D, Petermichl W, Kees M</i>
16:00 – 16:30	Coffee Break		
16:30 – 18:30	Kursraum 1	Kursraum 2	ICU 93/B3 or ICU 97/C4
	Group 2 Simulation Case scenarios and Trouble-Shooting <i>Malferteiner M, Heinze J, Preiss A</i>	Group 3 Management of Cannulas: tips and tricks <i>Wiest C, Lubnow M</i>	Group 1 Ward round <i>Dietl A, Müller T, Lunz D, Petermichl W, Kees M</i>
20:00	Welcome Dinner in Town: “who is who”		
			Bischofshof, Krauterermarkt 3

Tuesday, 24.09.

8:30 – 8:55	<i>Müller T</i>	Lecture Theatre A2	
9:00 – 9:25	<i>Fisser C</i>	Complications 1: leg ischemia, thrombosis, HIT	
9:30 – 9:55	<i>Wiest C</i>	Complications 2: bleeding and neurological problems	
10:00 – 10:25	<i>Müller T</i>	Hypoxemia on ECMO: what can be done? /Threshold for transfusion	
10:30 – 11:00	Coffee Break		
11:00 – 11:25	<i>Vandenbriele C</i>	Anticoagulation for ECMO: standards and alternatives, monitoring today	
11:45 – 12:10	<i>Lubnow M</i>	Weaning VV-ECMO, weaning failure and further options	
12:15 – 12:35	<i>Fisser C</i>	Quality assessment of an ECMO center: what is needed	
12:40 – 13:30	Lunch Break		
13:30 – 15:30	Kursraum 1	Kursraum 2	Kursraum 3
	Group 3 Simulation Case scenarios and Trouble-Shooting <i>Malfertheiner M, Heinze J, Preiss A</i>	Group 1 Case discussions: how would you decide? <i>Müller T,</i> <hr/> Group 1 Proning on ECMO: practical aspects <i>Steinmann J and Team 90, Hoibl E, Schettler F</i>	Group 2 E-CPR Simulation: Theory and practice <i>Trummer G, Lunz D, Philipp A</i>
15:30 – 16:00	Coffee Break		
16:00 – 18:00	Kursraum 1	ICU 90/C2	Kursraum 3
	Group 3 Hands-on: Priming, emergency management, trouble shooting <i>Foltan M, Dembianny J</i>	Group 2 Proning on ECMO: practical aspects <i>Steinmann J and Team 90, Hoibl E, Schettler F</i>	Group 1 E-CPR Simulation: Theory and practice <i>Trummer G, Lunz D, Philipp A,</i>
	Kursraum 1	ICU 90/C2	
	Group 2 Hands-on: Priming, emergency management, trouble shooting <i>Foltan M, Dembianny J</i>	Group 3 Proning on ECMO: practical aspects <i>Steinmann J and Team 90, Hoibl E, Schettler F</i>	
Evening	no obligations		

Wednesday, 25.09.

8:30 – 8:55	<i>Dietl A</i>	Lecture Theatre A2	
9:00 – 9:25	<i>Lubnow M</i>	(Patho-) physiology of VA-ECMO	
9:30 – 9:55	<i>Brechot N</i>	VA-ECMO: indications, contra-indications, efficiency	
10:00 – 10:25	<i>Lubnow M</i>	Patient management on VA-ECMO 1: monitoring the organs and dialysis	
10:30 – 11:00	Coffee Break		
11:00 – 11:25	<i>Brechot N</i>	Patient management on VA-ECMO 2: hemodynamics and ventilation	
11:30 – 11:55	<i>Staudacher D</i>	Impella: indications and limits	
12:00 – 13:00	<i>Broomé M</i>	Enhancing our understanding: Case simulation with AI	
13:00 – 14:00	Lunch Break		
14:00 – 16:00	Kursraum 1	Kursraum 2	Kursraum 3
	Meet the Industry: Getinge Proven and news: hands-on	Meet the Industry: Fresenius Proven and news: hands-on	Meet the Industry: Resuscitec Proven and news: hands-on
	Kursraum 1	Kursraum 2	Kursraum 3
	Meet the Industry: Getinge Proven and news: hands-on	Meet the Industry: Fresenius Proven and news: hands-on	Meet the Industry: Resuscitec Proven and news: hands-on
			Atrium Lecture Theatre A2
ECMO: What is new			
xxx			
xxx			
xxx			
16:00 – 16:30	Coffee Break		
16:30 – 18:30	Lecture Theatre A2		
	Symposium: ECMO - State of The Art <i>Moderation: Müller T, Lubnow M</i>		
	<i>Brechot N</i> <i>Weber-Carstens S</i> <i>Dietl A</i> <i>Balik M</i> <i>Broome M</i> <i>Staudacher D</i>	ECMO: my thoughts on...	
18:30 - 19:00	Get Together with Brezel and Beer		

Thursday, 26.09.

		Lecture Theatre A2	
8:30 – 8:55	<i>Balik M</i>	ECHO and ECMO	
9:00 – 9:25	<i>Dietl A</i>	ECMO in the Cath Lab	
9:30 – 9:55	<i>Philipp A</i>	Complications 3: blood cell trauma and technical failure	
10:00 – 10:25	<i>Müller T</i>	Unloading the left ventricle: when and how?	
10:30 – 11:00	Coffee Break		
11:00 – 11:25	<i>Balik M</i>	Weaning from VA-ECMO, weaning-failure and further options	
11:30 – 11:55	<i>Trummer G</i>	Mechanical cardiac assist devices and post-cardiotomy ECMO	
12:00 – 12:25	<i>Lunz D</i>	E-CPR in IHCA and OHCA	
12:30 – 13:00	<i>Trummer G</i>	Post resuscitation treatment	
13:00 – 14:00	Lunch Break		
14:00 – 16:00	Kursraum 1	Kursraum 2	Kursraum 3
	Group 1 Hands-on: Priming, emergency management, trouble shooting <i>Foltan M, Dembianny J</i>	Group 2 Case discussions: how would you decide? <i>Müller T,</i>	Group 3 E-CPR Simulation: Theory and practice <i>Trummer G, Lunz D, Philipp A</i>
ICU 93/B3 or ICU 97/C4	Kursraum 2		
	Group 2 Ward round <i>Dietl A, Müller T, Petermichl W, Kees M</i>	Group 1 Management of Cannulas: tips and tricks <i>Wiest C, Lubnow M</i>	
16:00 – 16:30	Coffee Break		
16:30 – 17:30	ICU 93/B3 or ICU 97/C4	Kursraum 2	Kursraum 1
	Group 2 Ward round <i>Dietl A, Lunz D, Petermichl W, Kees M</i>	Group 1 Management of Cannulas: tips and tricks <i>Wiest C, Lubnow M</i>	Group 3 Case discussions: how would you decide? <i>Müller T, oder Lunz D, Philipp A</i>
from 18:00	Cases, Questions, Discussions, Bavarian Beer and Food <i>Lubnow M, Müller T</i>		
Hubertushöhe, Wilhelm Raabe Str.1			

Friday, 27.09.

8:30 – 8:55	<i>Müller T</i>	Neuro prognostication and diagnosis of brain death on ECMO	Lecture Theatre A2
9:00 – 9:25	<i>Wiest C</i>	Long-term outcome: what can be expected	
9:30 – 9:55	<i>Broome M</i>	Ethical challenges in ECMO therapy	
10:00 – 10:25		Questions and discussion	
10:30 – 11:00	Coffee Break		
11:00 – 11:25	<i>Müller T</i>	ECMO in septic shock and massive pulmonary embolism	
11:30 – 11:55	<i>Lubnow M</i>	Hybrid ECMO: when, which, what problems?	
12:00 – 12:25	<i>Philipp A, Lunz D</i>	Transport on ECMO	
12:30 – 13:00	<i>Müller T</i>	Summary and review of the most important	
13:00 – 14:00	Lunch Break and group photo		
14:00 – 14:30	Knowledge Assessment <i>Lubnow M, Lunz D, Philipp A, Müller T.</i>		Lecture Theatre A2
14:30 – 15:00	Course Evaluation, final discussion <i>Lubnow M, Lunz D, Philipp A, Müller T.</i>		Lecture Theatre A2
15:00	Coffee Break and Fare Well		

Faculty:

Prof. Dr. Martin Balik, Dept. of Anaesthesia and Intensive Care, 1st Medical Faculty, Charles University, Prague

Prof. Dr. Nicolas Brechot, Médecine Intensive-Réanimation, AP-HP.Centre – Université Paris Cité, France

Dr. Sam Brixius, University Hospital Freiburg, Germany

Prof. Dr. Michael Broomé, ECMO ICU, Karolinska University Hospital, Stockholm, Sweden

Jan Dembianny, Perfusion Department, Department for Cardio-thoracic Surgery, UK Regensburg

PD Dr. Alexander Dietl, Department for Internal Medicine II, University Hospital Regensburg

PD Dr. Christoph Fisser, Department for Internal Medicine II, University Hospital Regensburg

Maik Foltan, Perfusion Department, Department for Cardio-thoracic Surgery, University Hospital Regensburg

Johannes Heinze, Perfusion Department, Department for Cardio-thoracic Surgery, UK Regensburg

Elisabeth Hoibl, Department for Physical Therapy, University Hospital Regensburg

Frank-Peter Fisser, Department for Anesthesiology, University Hospital Regensburg

PD Dr. Martin Kees, Department for Anesthesiology, University Hospital Regensburg

PD Dr. Matthias Lubnow, Department for Internal Medicine II, University Hospital Regensburg

PD Dr. Dirk Lunz, Department for Anesthesiology, University Hospital Regensburg

PD Dr. Maximilian Malfertheiner, Clinic for Pulmology Donaustauf, Germany

Prof. Dr. Thomas Müller, Department for Internal Medicine II, University Hospital Regensburg

Dr. Walter Petermichl, Department for Anesthesiology, University Hospital Regensburg

Alois Philipp, University Hospital Regensburg

Dr. Steffen Pooth, University Hospital Freiburg, Germany

Dr. Adrian Preiss, Department for Nephrology, University Hospital Regensburg

Frank Schettler, Perfusion Department, Department for Cardio-thoracic Surgery, UK Regensburg

Peter Schüller, Department for Anesthesiology, University Hospital Regensburg

PD Dr. Dawid Staudacher, Interdisciplinary Center for Intensive Care Medicine, University Hospital Freiburg, Germany

Dr. Johannes Steinmann, Department for Anesthesiology, University Hospital Regensburg

Prof. Dr. Georg Trummer, University Cardiac Center, Freiburg-Bad Krozingen

Prof. Dr. Christophe Vandembrielle, University Hospital Leuven, Belgium

Prof. Dr. Steffen Weber-Carstens, Department for Anesthesiology and Intensive Care, Charité – University Hospital Berlin

Dr. Clemens Wiest, Department for Internal Medicine II, University Hospital Regensburg