

## **EXTRACORPOREAL MEMBRANE OXYGENATION (ECMO) HANDS-ON WORKSHOP**

Emirates Pediatric and Neonatal Intensive Care Conference

November 6<sup>th</sup> -7<sup>th</sup> /2019

AlJalelah Hospital, Dubai, UAE

### **WORKSHOP DESCRIPTION**

Intended for Critical Care Physicians, Anesthesiologists, Thoracic Surgeons, Cardiac Surgeons and all interested Allied Health Professionals, This highly immersive hands-on workshop is designed to take the attendees through a complete Extracorporeal Membrane Oxygenation (ECMO) tour; from the basic physiological and mechanical principles to the latest techniques and technology updates .Through integrated clinical scenarios, providers will apply the knowledge gained towards the initiation and management of ECMO on simulated cases of acute respiratory and hemodynamic failure. Attendees will deepen their understanding of the applied physiology of both venovenous (VV) and venoarterial (VA) ECMO utilizing live tissue and high fidelity Workshop stations and its interaction with conventional life support treatments.

### **WORKSHOP LEARNING OBJECTIVES**

Upon completion of this workshop, participants should be able to:

- Understand the basic principles of ECMO.
- Identify the components of the ECMO circuit.
- Describe basic and advanced physiology of VV and VA ECMO.
- Recognize major indications and contraindications of VV and VA ECMO.
- Identify common problems and major complications of ECMO.
- Differentiate the interaction ECMO has on various patient organ systems.
- Comprehensively assess the ECMO patient with appropriate monitoring techniques.

## **ACADEMIC SPONSORSHIP**

Saudi Critical Care Society (SCCS) has Extra Corporeal Life Support (ECLS) Chapter. The chapter is represented by more than 37 physicians and surgeons throughout the Kingdom of Saudi Arabia who have been trained and qualified in treating patients with extra corporeal life support (ECLS). It provides ongoing teaching, supervision and research to ensure proper delivery of ECLS in high standard when needed.

## **REGISTRATION FEE**

## **COURSE DIRECTORS**

Dr. Abdullah alzahrani,MD

Dr.Mohammed Bakhsh,MD

## **Members**

Dr. Husam Bahauden ,MD  
Dr. Sachi Patil MD

Dr Jameel Khan ,MD  
Mr.AbdulAhad Khan,CP

# Program

The ECMO Program consists of rotations between Didactic lectures and Hands-On stations. The program is designed so each participant will experience all stations and lectures. The topics are listed below

## **Nov 6th 2019**

| Time          | Lecture   |
|---------------|---|
| 7:30 – 8:25   | Registration  |
| 8:30 – 8:55   | Announcements, Introducing Faculty and Intro to Simulation<br>Dr. Husam |
| 9:00 – 9:25   | ECLS History Dr .Bakhsh   |
| 9:30 – 9:55   | Intro to ECLS Physiology Dr .Zahrani                                    |
| 10:00 – 10:30 | Coffee Break  |
| 10:30 – 10:55 | Intro to ECLS Circuits and Devices Perfusionist                         |
| 11:00 – 11:25 | Anticoagulation for ECLS Dr. Sachin                                     |
|               | ECLS for patients with Normal Cardiac Anatomy                           |
| 11:30 – 11:55 | ECLS for Respiratory Failure ( VVECMO) Dr Zahrani                       |
| 12:00 – 12:25 | ECLS for heart Failure (VA ECMO ) Dr. Khan                              |
| 12:30 – 13:30 | Lunch   |
| 13:30 – 13:55 | Hands on: Orientation to the machine perfusionist                       |
| 14:00 – 14:55 | Hands on: Case Scenarios Simulation all the team                        |
| 15:00 – 15:55 | Debriefing Post ECLS  |
| 16:00 – 16:15 | Coffee Break  |
| 16:20 – 16:40 | End of Day 1: Q & A   |
|               |   |

**Nov 7<sup>th</sup> 2019**

| Time          | Lecture                                  |
|---------------|--|
| 8:00 – 8:25   | ECLS post cardiac surgery                |
| 8:30 – 8:55   | ECLS for cyanotic heart disease Dr Khan  |
| 9:00 – 9:25   | ECLS for single ventricle Dr.Khan        |
| 9:30 – 9:55   | Complications & Emergencies Dr.sachin    |
| 10:00 – 10:30 | Coffee Break                             |
| 10:30 – 10:55 | ECMO CPR Dr Zahrani                      |
| 11:00 – 11:25 | Ethics of end-of life on ECLS Dr zahrani |
| 11:30 – 11:55 | ICU Management of ECMO DR Bakhsh         |
| 12:00 – 12:25 | Weaning off Dr Bakhsh                    |
| 12:30 – 13:30 | Lunch                                    |
| 13:30 – 13:55 | ECMO cases study discussion Dr. Zahrani  |
| 14:00 – 14:55 | Hands on: Mega Code all the team         |
| 15:00 – 15:55 | End of Day 2: Conclusion, Q & A          |
| 16:20 – 16:40 |  |
|               |  |