

# Ultrasound in Emergency and Critical Care Unit

19th - 20th February 2011, Indraprastha Apollo Hospital, Sarita Vihar, New Delhi

UECC - 05

**Course Director : Luca Neri**

**Course Coordinator : V Muralidhar**

## Day 1

- 8:00 ▶ Registrations & Pre-course Test
- 8:30 ▶ Point-of-care US in Emergency and Critical Care: empowering life support protocols worldwide
- 8:50 ▶ Critical ultrasound techniques: image generation, acquisition, interpretation & administration.
- 9:10 ▶ **Assessment:** Obstruction/atelectasia, tracheal displacement and lesions, emphysema, Prandial status.  
**Procedures:** ETT, crico-tyroidotomy, tracheo-tomy/-stomy.
- 9:30 ▶ **Management:** Airway Protocols & Interactive Cases
- 9:50 ▶ **Assessment:** Pleural effusion, alveolar consolidation, interstitial syndrome, pneumothorax. Diaphragm impairment.
- 10:10 ▶ **Procedures:** Needle aspiration, thoraco-centesis, chest tube insertion, thoracotomy.
- 10:30 ▶ **Management:** Respiratory Protocols & Interactive Cases
- 10:50 **Tea/ Coffee Break**
- 11:10 ▶ **Assessment:** Introduction to echocardiography, Cardiac and caval vein windows.
- 11:30 ▶ **Assessment:** Critical hemodynamic assessment: heart morphology/performance/filling state, pericardial effusion/tamponade, caval vein variations.
- 11:50 ▶ **Assessment:** Thrombo-embolic disease: deep venous thrombosis, pulmonary embolism.
- 12:10 ▶ **Management:** Cardio-circulatory Protocols & Interactive Cases [FEEL, FATE, L/H/CV]
- 12:30 **Lunch**
- TRAINING
- 13:30 ▶ US HANDS-ON & SIMULATION:  
[human models, phantoms & ultrasound simulator]  
Machine orientation.  
Signs & patterns, sono-anatomy.  
Airway, Breathing, Circulation.
- 17:30 ▶ Session Closure

**Faculty :**

**Luca Neri, Deniel Lichtenstein, Enrico Storti**

**Jose Chacko, Sanjeev Bhoi, Pradeep D'costa**

**Vinay Gulati, Kishore Pichamuthu, Tejprakash Sinha**

## DAY 2

- 8:00 ▶ Review, Debriefing, Q/A
- 8:30 ▶ **Assessment:** Peritoneal effusion: FAST windows.
- 8:50 ▶ **Assessment:** N/ retro-peritoneal, parenchymal and soft tissue haematomas.
- 9:10 ▶ **Assessment:** Abdominal & thoracic aortic aneurysm: detection, measurement, N/ dissection and rupture.
- 9:30 ▶ **Assessment:** O&G emergencies: ectopic vs intrauterine, retroplacental haematoma, placenta previa.  
Fetus: movements, heart beat, position, presentation.
- 9:50 ▶ **Procedures:** Defibrillation, TC & IV pacing.  
Pericardiocentesis, pleurocentesis.  
Paracentesis, DPL, laparotomy.
- 10:10 ▶ **Procedures:** Peripheral & central venous catheterization.
- 10:30 ▶ **Management:** Cardio-circulatory Protocols & Interactive Cases [FAST, EFAST, FAST-ABCDE, L/H/CV]
- 10:50 **Tea/ Coffee Break**
- 11:10 ▶ **Assessment:** Optic nerve sheath/disc, pupil assessment (+midline shift, cervical fracture, neonatal assessment).  
**Management:** Neurological Protocols & Interactive Cases [US-NEU]
- 11:30 ▶ US ABCDE Primary Management:  
- US Trauma Life Support [US-TLS]  
- US Advanced Cardiac Life Support [US-ACLS]  
- US-Triage & US-EMS/HEMS
- 11:50 ▶ Concepts on Head-to-Toes  
Secondary Management & Monitoring:  
- Head, Thorax, Abdomen, Limbs  
- Assessment, treatment, monitoring, and follow-up
- 12:10 ▶ Ultrasound education and development:  
WINFOCUS global initiative for PHC, EM and CCM.
- 12:30 **Lunch**
- 13:30 ▶ US HANDS-ON & SIMULATION:  
[human models, phantoms & ultrasound simulator]  
Circulation, Disability  
Dyspnea, Shock, Coma  
US Trauma Life Support [US-TLS]  
US Advanced Cardiac Life Support [US-ACLS]
- 17:30 ▶ Post-Course test & Closure