SIMLAB 2024
Procedural Simulation

**IMPORTANT NOTICE: access to simulation workshops is limited to pre-registered delegates**

About the workshops: During each of these 2-hour sessions, hands-on training will be provided on specific perioperative procedures. Instructors will demonstrate the skills and then guide, observe and provide feedback to participants while they perform the procedures on their own. A variety of live models, virtual reality simulators, part task trainers and ultrasound machines will be available to facilitate and improve learning.

Programme overview: The 2024 procedural simulation programme includes the following topics:

- Emergency front of neck access and airway ultrasound
- Cardiac and vascular Point-of-Care Ultrasound (POCUS)
- Ultrasound-guided paediatric vascular access, umbilical vein catheterisation and intraosseous access
- Brain ultrasound: an open window to the brain of your patient
- Lung and gastric ultrasound

Specific learning objectives and target audience are defined for each workshop topic.
Emergency front of neck access and airway ultrasound

**This workshop is repeated twice**

### Learning objectives:
During this session, participants will:

- learn and perform basic assessment of the airway using ultrasound;
- learn how to recognize and locate the cricoid membrane using ultrasound;
- learn and perform surgical cricothyrotomy based on the most recent guidelines;
- practice Scalpel cricothyrotomy and Seldinger method cricothyrotomy.

### Target audience:
Residents, fellows and practitioners interested in improving/rehearsing their skills and knowledge in the field.

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Location</th>
<th>Event Name</th>
<th>Description</th>
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<tbody>
<tr>
<td>Saturday</td>
<td>25 May 2024</td>
<td>10:30-12:30</td>
<td>SimSpace 2</td>
<td>SIMPRO1 Emergency front of neck access and airway ultrasound (1)</td>
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<tr>
<td>Saturday</td>
<td>25 May 2024</td>
<td>13:30-15:30</td>
<td>SimSpace 2</td>
<td>SIMPRO2 Emergency front of neck access and airway ultrasound (2)</td>
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Lung and gastric ultrasound

**This workshop is repeated twice**

**Learning objectives:** During this session, participants will:

- Learn how to perform and interpret normal lung ultrasound Protocol;
- Assess and recognise lung sliding, “A” and “B-lines”;
- Learn how to diagnose major lung ultrasound pathology;
- Learn how to perform gastric ultrasound;
- Learn how to recognize an “empty stomach” and interpret stomach content (and volume);
- Learn how to use ultrasound to guide pleural drainage;
- Perform pleural drainage procedure.

**Target audience:** Residents, fellows and practitioners interested in improving/rehearsing their skills and knowledge in the field.

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<thead>
<tr>
<th>Saturday</th>
<th>SIMPRO3</th>
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<tr>
<td>25 May 2024</td>
<td>Lung and gastric ultrasound (1)</td>
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<tr>
<td>16:00–18:00</td>
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<tr>
<th>Sunday</th>
<th>SIMPRO4</th>
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<tr>
<td>26 May 2024</td>
<td>Lung and gastric ultrasound (2)</td>
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<tr>
<td>08:30–10:30</td>
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Procedural Simulation Workshops

Ultrasound-guided paediatric vascular access, umbilical vein catheterisation and intraosseous access

**This workshop is repeated twice**

**Learning objectives:** During this session, participants will:

- Learn indication and contra-indication of different vascular access in the paediatric patient;
- Learn preferred medication administration routes for specific situations;
- Perform umbilical vein catheterisation and intraosseous access;
- Practice ultrasound-guided vascular access

**Target audience:** Residents, fellows and practitioners interested in improving/rehearsing their skills and knowledge in the field.

**SIMPRO5**

Ultrasound-guided paediatric vascular access, umbilical vein catheterisation and intraosseous access (1)

**SIMPRO6**

Ultrasound-guided paediatric vascular access, umbilical vein catheterisation and intraosseous access (2)
BASIC brain ultrasound: an open window to the brain of your patient

**Learning objectives:** During this session, participants will:

- learn how to perform basic assessment of the brain – recognize basic method of the five reference planes (temporal window);
- learn how to determine structural problems (median shift, ventricular system problems, etc.);
- learn how to visualize anterior and posterior segments of the Willis polygon through the temporal window;
- learn how to assess the intracranial pressure;
- learn the basics of the Transcranial Color-Coded Sonography (TCCS);
- Eyeball/optic nerve sonography how and why (new perspectives).

**Target audience:** “Intermediate” neuro-anaesthetists, neuro-intensivists, intensivists or emergency physicians interested in developing/improving their skills and knowledge in the field.

**Sunday**
26 May 2024
16:00–18:00
SimSpace 2

SIMPRO7
BASIC brain ultrasound: an open window to the brain of your patient
**ADVANCED brain ultrasound: an open window to the brain of your patient**

**Learning objectives:** During this session, participants will learn:

- the advanced and integrated handling (BW, Doppler and PW) of the neurosonological method of the five reference brain planes – Complete examination at the patient’s bed;
- how to handle the fast neurosonological sequence NEUROFAST for a global brain assessment (integration and complementarity with Brain Function Monitoring);
- the indirect (assessment) and direct (calculation) measurement of ICP;
- how to use of the image fusion modality (neurosono/CTscan, neurosono/MRI) at the patient’s bed: development and future perspectives.

The session will also include interactive discussion of neurosonological imaging cases in everyday advanced practice.

**Target audience:** “Skilled” neuro-anaesthetists, neuro-intensivists, intensivists or emergency physicians interested in developing/improving their skills and knowledge in the field.

**Monday 27 May 2024**

08:00–10:00

SimSpace 2

**SIMPRO8**

**ADVANCED brain ultrasound: an open window to the brain of your patient**
**Cardiac and vascular Point-of-Care Ultrasound (POCUS)**

**This workshop is repeated twice**

**Learning objectives:** During this session, participants will:

- learn indications and how to perform a focused cardiac ultrasound examination using Transthoracic echocardiography (TTE);
- practice focused cardiac ultrasound examination on live models and on a virtual simulator;
- learn how to recognize and assess pericardial effusion/cardiac tamponade, left and right ventricular size and function, intravascular volume status;
- learn how to recognize and assess the thoracoabdominal aorta, the inferior vena cava and the proximal deep veins.

**Target audience:** "Novice and intermediate" residents, fellows and practitioners interested in improving their skills and knowledge in the field.

**Monday 27 May 2024**
10:30-12:30
SimSpace 2

**SIMPRO9**
Cardiac and vascular Point-of-Care Ultrasound (POCUS) (1)

**Monday 27 May 2024**
13:00-15:00
SimSpace 2

**SIMPRO10**
Cardiac and vascular Point-of-Care Ultrasound (POCUS) (2)