

**FRIDAY 29 MAY**

**SESSION 1**

**(08:30 – 10:30)**

**Session Chairs: TBC**

**08h00 – 08h30**

Registration

**Theoretical Background | Basic Principles**

**Opening Remarks**

Perspective vis a vis other modalities? - **Geirmund Unsgaard**

Physics of US for neurosurgeons - **Tormod Selbekk**

Understanding the US machine (knobology and probes) – **Tormod Selbekk**

Enhancing the US – Applications of CEUS - **Francesco Prada**

Navigated US/ Image fusion - **Aliasgar Moiyadi**

Practical tips - How I do it - **Aliasgar Moiyadi, TMH**

Interpreting the US and correlation with anatomy - **Francesco DiMeco**

**10h30 – 11h00**

**Refreshments – Exhibition Area**

<b>SESSION 2</b>	<b>11h00 – 12h30</b>
11h00 – 12h30	Hands on fine tuning US – Basics and principles – Faculty and trade
12h30 – 13h30	Working Lunch – Exhibition Area
<b>SESSION 3</b>	<b>13h30 – 15h00</b>
	<b>Session Chair: TBC</b>
	Applications and advances   Spectrum of applications
	Pediatrics - <i>Martin Schuhmann</i>
	Minimally Invasive surgery (endoscopy) - <i>Llewellyn Padayachy</i>
	LGG and Vascular - <i>Geirmund Unsgaard</i>
	Oncology - <i>Aliasgar Moiyadi</i>
	Newer Aspects - Elastography/ Therapeutic US - <i>Francesco Prada</i>
	Advanced Imaging in Brain tumors - <i>Mike Sathekge / Gioll Boshomane</i>
15h00 – 15h45	Refreshments – Exhibition Area
<b>SESSION 4</b>	<b>15h45 – 17h00</b>
	<b>Session Chairs: TBC</b>
15h45 – 17h00	IOUS - Global and local experience (15 Minutes each) - <i>James Balogun, Nigeria</i> - <i>Gavin Quigley, UK</i> - <i>Oliver Bozinov, Switzerland</i> - <i>Francesco DiMeco, Italy</i>



UNIVERSITEIT VAN PRETORIA  
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European Federation of Societies for  
**EFSUMB**  
Ultrasound in Medicine and Biology

**IOUS COURSE 2020 – PROGRAMME - DRAFT 2**  
**29 - 30 MAY 2020, UNIVERSITY OF PRETORIA**

	Open house discussion
19h00	Social event   Dinner

## SATURDAY 30 MAY

SESSION 5	08:00 – 10:00
	<b>Session Chairs: TBC</b>
<b>08h00 – 08h15</b>	Overview for the day. Divide all into workstation batches
<b>08h15 – 09h30</b>	<p>Hands on Module 1 Module 1 : Machine specific setup/ knobology and probes and their adjustment</p> <p>Hands on exercises:     Demonstrate machine and console (All Faculty)               Probes and their different features                                      Adjusting parameters of acquisition</p>
<b>09h30 – 10h45</b>	<p>Hands on Module 2: Technique of insonation/ Localization/ Methodical Tumor insonation (orthogonal and multiplanar imaging) Hands- On:     Probe draping – keep 1 cover and few gloves to mimic covers (with/without gel -see the difference)</p> <p>Recap of lecture taken previous day – 20 min</p> <p>Hands- On :     Probe draping – keep 1 cover and few gloves to mimic covers (with/without gel -see the difference) (All Faculty)     Acoustic coupling                          Object localization in phantoms and Anatomical orientation in Goat brain</p>
<b>10h45 – 11h00</b>	<b>Refreshments – Exhibition Area</b>
SESSION 6	11h00 – 12h00
<b>11h00 – 12h00</b>	<p>Hands on Module 3 Module 3: Target localization / Cyst aspiration / Hand-eye coordination/ {Elasto and (? CEUS)</p> <p>Recap of lecture taken previous day + Hand-eye coordination talk by <a href="#">Francesco Prada</a> – 20 min</p>

	<p>Hands on: Lesion (or cyst) localization (All Faculty) Hand-eye coordination Elasto/ CEUS in models</p>
<b>12h00 – 13h00</b>	<p>Hands on Module 4 Module 4: Resection control and artefact avoidance</p> <p>Artefacts in resection cavity and techniques of overcoming it</p> <p>Hands on : Simulation models – resect tumor and create cavity and insonate, endoscopic guidance.</p> <p>(All Faculty)</p>
<b>13h00 – 13h30</b>	<b>Lunch – Exhibition Area</b>
<b>SESSION 7</b>	<b>13h30 – 16h00</b>
	<b>Session Chairs: TBC</b>
<b>13h30 – 15h30</b>	<p><b>Module 4</b> - (Nav US AND Simulation) – 1 hour each in rotation (Split into groups)</p> <ol style="list-style-type: none"> <li>1. NavUS (limitations of 2DUS vs Nav US )</li> <li>2. Simulation – <a href="#">Francesco Dimeco/ Alessandro Perin</a></li> </ol>
<b>15h30 – 15h45</b>	<b>Refreshments – Exhibition Area</b>
15h45	Course Review and feedback
16h00	Conclude
<b>16h00 – 17h30</b>	<b>Committee Meeting to Review and Plan ahead</b>