

ICP

Pathophysiology, Measurement vs. Assessment & Data Interpretation

Date	Tuesday October 6, 2026
Time	09:00 – 11:00
Venue	Children's Cancer Hospital Egypt 57357

Learning Objectives

Upon completion of this activity, participants should be able to know:

- Improve knowledge and capabilities regarding a most central parameter of pediatric neurosurgery: intracranial pressure.

Course Directors

Prof. Llewellyn Padayachy
Pretoria University Hospitals
Pretoria, South Africa

Prof. Martin U. Schuhmann
University Hospital of Tübingen
Tübingen, Germany

Course Faculty

(alphabetically arranged)

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Course Program

- 09:00 09:15 Basic physical principles that govern ICP
- 09:15 09:30 For which pathologies does ICP need to be explored?
- 09:30 09:45 Options to assess ICP non-invasively and measure it invasively
- 09:45 10:00 Pitfalls in ICP measurements, especially in children
- 10:00 10:15 What is an age-dependent normal ICP?
- 10:15 10:30 When to move from ICP measurement to (multiparametric) monitoring?
- 10:30 10:45 ICP analysis: Overnight monitoring and shunt infusion studies
- 10:45 11:00 Methods/indications for indirect ICP measurements : ONSD
- 11:00 11:15 **Hands-On: Shunt infusion study and ONSD determination**

11:15 11:30

Coffee Break

Basics of Intraoperative Ultrasound

Date	Tuesday October 6, 2026
Time	11:30 – 16:00
Venue	Children's Cancer Hospital Egypt 57357
Max. Capacity	30

Learning Objectives

Upon completion of this activity, participants should be able to know:

- Learn about physical background of ultrasound, artefact interpretation and technical aspects to improve image quality.
- Explore options, goals and techniques for intraoperative US.

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Mr. Tormod Selbekk

SINTEF (Research Organization)
Trøndelag, Norway

Course Program

11:30	11:50	US Basics for the Neurosurgeon	T. Selbekk
11:50	12:10	Which US Machine in the OR?	L. Padayachy
12:10	12:30	US Anatomy and Orientation	M. Schuhmann
12:30	12:50	US Guidance: Ventricular Catheters	M. Schuhmann
12:50	13:10	US Guidance: Endoscopy	L. Padayachy
13:10	13:40	Hands-on: US Guided Targeting	M. Schuhmann L. Padayachy
13:40	14:20	Lunch Break	
14:20	14:40	US Navigation: Approach to Tumors & Other Targets	M. Schuhmann L. Padayachy
14:40	15:00	Resection Control in Tumor Surgery: Tips, Tricks, Navigation & Innovation	All Faculty
15:00	15:20	Use in Vascular, Chiari & Spine	M. Schuhmann L. Padayachy
15:20	16:00	Hands-on: Resection	M. Schuhmann L. Padayachy