

# 8<sup>th</sup> Pediatric Neurosurgery Symposium

26 - 27 June 2025 University Children's Hospital Basel (UKBB)





### Preamble

#### Dear Colleagues,

It is our pleasure to invite you to the 8th Pediatric Neurosurgery Symposium at the University Children's Hospital Basel (UKBB). Ongoing medical education is essential for both residents and pediatric specialists to stay abreast of the latest developments and advancements in the conditions we diagnose and treat in our young patients. This year, we will delve into the highly relevant and often complex topic of syndromic and non-syndromic craniosynostosis in children. Our discussions will cover both fundamental principles and the latest innovations in treatment. This symposium aims to provide you with the most up-to-date insights into diagnosis, clinical decision-making, multidisciplinary care, and therapeutic approaches. Craniosynostosis – particularly in its syndromic form – often requires long-term, complex management by a highly specialized, multidisciplinary team. An interdisciplinary approach, as practiced at centers like the University Children's Hospital in Basel, is essential to ensuring optimal care.

On Thursday, June 26th, we are honored to welcome world-renowned experts who will deliver keynote lectures and specialized talks on syndromic and non-syndromic craniosynostosis. We believe this session will be highly relevant and engaging for all physicians involved in the care of these children, including pediatricians, maxillofacial specialists, pediatric surgeons, neurosurgeons, neuropediatricians, psychologists, psychiatrists, and anyone with an interest in pediatric medicine.

The session will conclude with an expert panel roundtable discussion, providing participants with the opportunity to ask their most pressing questions and engage in insightful dialogue.

On Friday, June 27th, we will begin the second day with an engaging and dynamic discussion on challenging syndromic and non-syndromic craniosynostosis cases. This will be followed by an afternoon dedicated to hands-on workshop activities, designed primarily for residents but open to all interested participants. The workshops will focus on endoscopic synostectomy, posterior vault expansion craniotomy with and without distractors, and total calvarial expansion. Participants will have the opportunity to train on 3D-printed skulls, experience virtual reality for selected craniosynostosis cases, and explore the mechanics behind shunt technology for hydrocephalus treatment, among other interactive learning experiences.

# Participation in the symposium, as well as food and beverages during the meeting, will be offered free of charge thanks to the generous support of our sponsors.

We look forward to welcoming you to the University Children's Hospital in Basel for what promises to be a highly educational and collegial day, dedicated to expanding our collective knowledge in Pediatric Neurosurgery.

Warm regards,

Prof. Raphael Guzman, chief Pediatric Neurosurgery Prof. Jehuda Soleman, deputy chief Pediatric Neurosurgery Dr. Maria Licci, attending physician Pediatric Neurosurgery Dr. Ladina Greuter, attending physician Pediatric Neurosurgery

### Program

#### Thursday 26 June 2025

#### University Children's Hospital Basel (UKBB), Spitalstrasse 33, 4056 Basel.

8.00- 8.30 Registration and Coffee in Foyer
8.30- 8.35 Welcome address (Prof. Raphael Guzman and Prof. Jehuda Soleman, Basel)

### Syndromic and Non-Syndromic Craniosynostosis - Background (Chair: Dr. med. Andrea Bartoli, Geneva)

8.35 - 9.50	Overview and epidemiology of syndromic and non-syndromic
	craniosynostosis (Dr. Tamara Vernik, Basel)
8.55 - 9.10	Classification and clinical features of syndromic and non-
	syndromic craniosynostosis (Dr. Katharina Lutz, Bern)
9.15 - 9.30	Genetic aspects and genetic testing in craniosynostosis
	(Prof. Isabel Filges, Basel)
9.35 - 9.50	Radiological features in syndromic and non-syndromic cranio-
	synostosis (Prof. Irina Mader, Basel)
9.55 - 10.10	Quantifying cranial and facial shape changes using 3D photo-
	grammetry in syndromic and non-syndromic craniosynostosis
	(PD Dr. Benito Benitez, Basel)
10.15 - 10.30	Neuropsychological and cognitive aspects in craniosynostosis
	(Prof. Federico Di Rocco, Lyon)

10.30 - 11.00 Coffee break

#### Keynote Lecture I (Chair: Prof. Javier Fandino, Aarau)

11.00 - 11.25Evolution of craniosynostosis treatment over the years<br/>(Prof. Federico Di Rocco, Lyon)

#### Non-syndromic Craniosynostosis– Surgical Treatment Part I (Chair: PD Dr. Mahmoud Messerer, Lausanne)

11.30 - 11.55	Open surgical techniques in non-syndromic craniosynostosis
	(Prof. Shlomi Constantini, Tel Aviv)
12.00 - 12.15	Open CAD/CAM-assisted craniosynostosis surgery
	(Prof. Andreas Müller, Basel)

#### 12.15 - 13.15 Lunch break

#### Non-syndromic Craniosynostosis– Surgical Treatment Part II (Chair: Prof. Shlomi Constantini, Tel Aviv)

13.15 - 13.30 Total calvarian reconstruction, late and recurrent treatment of craniosynostosis (Prof. Raphael Guzman, Basel)
 13.35 - 14.00 Endoscopically assisted techniques in non-syndromic and syndromic craniosynostosis (Prof. Jehuda Soleman, Basel)

#### Keynote Lecture II (Chair: PD Dr. Andrea Cardia, Lugano)

14.00 -14.25 Non-syndromic craniosynostosis: Indications for surgery (Prof. Irene Mathijssen-Rotterdam)

# Multidisciplinary care for syndromic craniosynostosis (Chair: PD Dr. Christian Zweifel, Chur)

Ophthalmological aspects in syndromic craniosynostosis (Dr.
Daniela Suter-Starosta, Basel)
Airway management and disorders in syndromic craniosynosto-
sis (Prof. Daniel Trachsel, Basel)
Modern technologies in surgical treatment of children with
craniosynostoses from a cranio-maxillo-facial perspective (Prof.
Dawid Larysz, Olsztyn)

#### 15.30- 16.00 Coffee break

## Syndromic Craniosynostosis – Surgical treatment (Chair: Prof. Ulf Schneider, Luzern)

16.00- 16.15	Treatment workflow and primary reconstruction techniques in
	syndromic craniosynostosis (Prof. Roman Khonsari, Paris)
16.20 -16.35	Distraction techniques and posterior vault expansion in syndro-
	mic craniosynostosis (PD. Dr. Benito Benitez, Basel)
16.40 – 16.55	Treatment of ICP, hydrocephalus and secondary Chiari malfor-
	mation in non-syndromic and syndromic craniosynostosis (Prof.
	Radek Frič, Oslo)

#### Round table discussion (Moderator: Prof. Jehuda Soleman, Basel)

- 17.00- 18.00 Controversies in non-syndromic and syndromic craniosynostosis (Prof. Constantini, Prof. Di Rocco, Prof. Edwards, Prof. Frič, Prof. Guzman, Prof. Khonsari, Prof. Larysz)
   18.05-18.10 Closing remarks (Prof. Raphael Guzman, Basel)
- 18.10 Apéro riche

#### 20.00 Dinner

Disclaimer: The post-dinner programme, including any live entertainment and bar services, is informal and not part of the sponsored symposium events. Costs and fees incurred are to be pay personally.

#### Friday 27 June 2025

#### Anatomical Institute University of Basel, Pestalozzistrasse 20, 4056 Basel.

08.45-09.00	Registration and welcome coffee in the Anatomy Institute
09.00- 09.15	Welcome (Prof. Raphael Guzman/Prof. Jehuda Soleman, Basel)

#### **Case discussions**

09.15 - 12.00	Case Discussion Craniosynostosis, (speakers: Dr. Bartoli, Prof.
	Constantini, Prof. Di Rocco, Prof. Guzman, Prof. Soleman)

#### 12.00 – 13.00 Lunch Break

#### Hands-on course

<u>Please note:</u> Hands-on Activities are limited for 25 participants. First come, first serve, everyone is welcome as an observer.

13.00 – 16.45	- Endoscopic Synosectomy
	- Posterior vault expansion craniotomy and distractors.
	- Total calvarial Expansion
	- Hydrocephalus by Integra-Codman and by MIETHKE B Braun
	- Patient positioning and pinning techniques in Children
	- Virtual Reality on Craniosynostosis

#### 16.45 – 17.00 Closing remarks and feedback

### Speakers







Prof. S. Constantini, Tel Aviv



Prof. F. Di Rocco, Lyon



Prof. M. Edwards, San Francisco



Prof. I. Filges, Basel



Dr. R. Frič, Oslo



Prof. R. Guzman, Basel



Prof. R. Khonsari, Paris



Prof. D. Larysz Olsztyn



Dr. K. Lutz, Bern



Prof. I. Mader, Basel



Prof. I. Mathijssen, Rotterdam



Prof. A. Müller, Basel



Prof. J Soleman, Basel



Dr. D. Suter-Starosta, Basel



Prof. D. Trachsel, Basel



Dr. T. Vernik, Basel





### Session Chairs



Dr. A. Bartoli, Geneva



Prof. A. Cardia, Lugano



Prof. S. Constantini, Tel Aviv



Prof. J. Fandino, Aarau



PD Dr. M. Messerer, Lausanne



Prof. U. Schneider, Luzem



Prof. J Soleman, Basel



PD Dr. Zweifel, Chur





Dr. A. Bartoli, Geneva

Prof. R. Guzman,

Basel



Prof. S. Constantini, Tel Aviv



Dr. M. Licci, Basel



Prof. J Soleman, Basel



Prof. M. Edwards, San Francisco



Dr. L. Greuter, Basel











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