

International School of Neurological Sciences of Venice  
President: Giuliano Avanzini – Director: Francesco Paladin

## Brain exploration and epilepsy surgery – 4 Epilepsy surgery at pediatric age



*San Servolo, Venice (Italy), 7-18 July 2019*



### Course Directors

**Helen Cross (UK) and Imad Najm (US)**



**Epilepsy Summer School Director: Marco de Curtis**

**Scientific committee: Giuliano Avanzini, Marco de Curtis, Francesco Paladin**

Aim of the Course is to teach attendees (1) the effects of uncontrolled epilepsy on childhood development, (2) to utilize knowledge to select pediatric patients for epilepsy surgery using EEG, semiology, imaging and other techniques; (3) to identify patients who require invasive evaluations and be able to choose the appropriate invasive technique; (4) to understand the various surgical resective and non resective approaches in pediatric epilepsy surgery and (5) to manage a Pediatric Epilepsy Surgery team. The Course is targeted to pediatric neurologists, neurophysiologists, neuroradiologists, pediatric neurosurgeons and clinical neuroscientists interested in the pathophysiology, diagnosis and management of pharmacoresistant epilepsies in children, and in the development of pediatric epilepsy surgery programs. The Course is based on formal lectures, practical case based discussions, debates between experts, and special group activities. Attendees will be grouped in small teams to prepare a research project on pediatric epilepsy under the supervision of two faculty tutors.

#### **Tutors:**

Gary Mathern	US	William Gaillard	US	Martin Tisdall	UK
Kees Braun	NL	Julia Jacobs	D	Laura Tassi	I
Helen Cross	UK	Imad Najm	US		
Luca de Palma	I	Eliseu Paglioli	BR		
Petia Dimova	BG	Georgia Ramantani	CH		
Martha Feucht	A	Bertil Rydenhag	S		

#### **Lecturers:**

Alexis Arzimanoglou	F
Ingmar Blumcke	D
Christine Bulteau	F
Lara Jehi	US
Lieven Lagae	BG
Roberto Spreafico	I



The Course is supported by the **International League Against Epilepsy (ILAE)** and by the **Fondazione Istituto Neurologico C. Besta**

## Course Program

**Sunday, July 7, 2019**

<b>7.00 pm</b>	<b>registration</b>
<b>7.30 pm</b>	<b>welcome buffet dinner</b>

**Day 1–Monday, July 8- Pediatric Epilepsy Surgery: Timing and pathology**

8.30 -9.00 am	Welcome of ISNV President and Introduction of Course Directors	
9.00-10.00 am	Epilepsy Surgery in Children: Then and Now	H. Cross
10.00-11.00	Prognosis of early onset lesional epilepsy	M. Feucht
<b>11.00-11.15 am</b>	<b>Coffee Break</b>	
11.15-12.15 am	Epilepsy and the developing brain	L. Lagae
12.15-13.15 pm	Selection of candidates: the case for early surgery (Cognitive, motor and psychosocial outcomes)	G. Ramantani
<b>1.15-2.30 pm</b>	<b>Lunch</b>	
2.30-3.30 pm	Selection of candidates: the case for early surgery (Seizure outcome)	K. Braun
3.30-4.30 pm	Pathology of Epilepsy in Children	I. Blumcke
<b>4.30-5.30 pm</b>	<b>Formation of project teams</b>	
6.30 -7.30 am	How to present a clinical case	P. Dimova

**Day 2–Tuesday, July 9- Pre-surgical evaluation 1**

9.00 -10.00 am	Procedures for selecting surgical candidates	L. Jehi
10.00-11.00 am	The role of semiology in surgical selection	L. Tassi
<b>11.00-11.15 am</b>	<b>Coffee Break</b>	
<b>11.15 am-1.15 pm</b>	<b>Case presentations and discussions: Semiology</b>	xxxxx
<b>1.15-2.30 pm</b>	<b>Lunch</b>	
2.30-3.30 pm	Pitfalls in the interpretation of video EEG	P. Dimova
<b>3.30-5.30 pm</b>	<b>Case presentations and discussions: Scalp EEG</b>	xxxxx
<b>5.30-6.30 pm</b>	<b>Projects discussion</b>	

**Day 3–Wednesday, July 10- Pre-surgical evaluation 2**

9.00 -10.00 am	Optimising structural MRI	K. Braun
10.00-11.00 am	The role of functional imaging in paediatric pre-surgical evaluation	W. Gaillard
<b>11.00-11.15 am</b>	<b>Coffee Break</b>	
<b>11.15 am-1.15 pm</b>	<b>Case presentations and discussions: Imaging/pathological correlations</b>	xxxxx
<b>1.15-2.30 pm</b>	<b>Lunch</b>	
2.30-3.30 pm	MEG/ESI	J. Jacobs
3.30-4.30 pm	Neurocognitive evaluation	C. Bulteau
4.30 – 5.30pm	The concept of the patient management conference	A. Arzimanoglou
5.30-6.30 pm	<b>Projects discussion</b>	

**Day 4–Thursday, July 11– Invasive evaluation**

9.00 -10.00 am	Invasive recordings in children; when and why	L. de Palma
10.00-11.00 am	Ins and outs of Stereo EEG and subdural grids	I. Najm
<b>11.00-11.15 am</b>	<b>Coffee Break</b>	
<b>11.15 am-1.15 pm</b>	<b>Case presentations and discussions: invasive recordings or not</b>	<b>xxxxx</b>
<b>1.15-2.30 pm</b>	<b>Lunch</b>	
2.30-3.30 pm	Debate: is Stereo EEG the invasive investigation of choice in all children?	L. Tassi vs H. Cross
<b>3.30-5.30 pm</b>	<b>Small group discussions: planning invasive EEG evaluation</b>	<b>xxxxx</b>
5.30-6.30 pm	<b>Projects discussion</b>	

#### **Day 5–Friday, July 12 Surgery**

9.00 -10.00 am	Resective surgery in children –when enough is enough	B. Rydenhag
10.00-11.00 am	Surgery in eloquent cortex	G. Mathern
<b>11.00-11.15 am</b>	<b>Coffee Break</b>	
11.15 am-12.15 pm	Hemi-disconnections & multilobar resection	E. Paglioli
12.15am-13.15 pm	Is there a role for corpus callosotomy and other palliative surgery?	M. Tisdall
<b>1.15-2.30 pm</b>	<b>Lunch</b>	
<b>2.30-5.30 pm</b>	<b>Practical session on neuropathology –</b>	R. Spreafico
5.30-6.30 pm	<b>Projects discussion</b>	

#### **Day 6–Saturday, July 13– Controversies in Pediatric Epilepsy Surgery**

9.00 -09.45 am	Transfer of function after resection: fact or fiction?	W. Gaillard
09.45-10.300 am	Extent of resection: Should it be defined by anatomy, electrophysiology or function	E. Paglioli
10.30 – 11.00 am	Early vs late wean of anti-epileptic medications	K. Braun
<b>11.00-11.15 am</b>	<b>Coffee Break</b>	
11.15-12.15 am	To operate or not to operate on patients with Tuberous sclerosis?	M. Tisdall
12.15-1.15 am	When to consider surgery – should we wait for drug resistance?	A. Arzimanoglou
<b>1.15-2.30 pm</b>	<b>Lunch</b>	

#### **Day 7– Sunday, July 14**

10.00-11.00 am	Group discussion of cases presented by the students	
<b>11.00-11.15 am</b>	<b>Coffee Break</b>	
11.15-1.15 am	Group discussion of cases presented by the students	
<b>1.15-2.30 pm</b>	<b>Lunch</b>	
<b>2.30-5.30 pm</b>	Group discussion of cases presented by the students	

#### **Days 8-10 –Monday, Tuesday, Wednesday, July 15-17– Project development**

Breakdown into groups and development pediatric epilepsy surgery projects conditions all tutors

**July 17<sup>th</sup>, after 7.30 pm** Final party.....bring music from your Country!!!

#### **Day 11 –Thursday July 18**

<b>8.30-12.30 am</b>	<b>Working group presentations:</b> research projects are presented and 45 minutes per group, discussion included	all tutors
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**2.00 pm**                      ***Gondola Prize winner and end of the Course***