



*Università degli Studi di Firenze*



# Advances in the Treatment of Focal Cortical Dysplasia



*Florence, June 6<sup>th</sup> - 8<sup>th</sup> 2013  
Children's Hospital A. Meyer  
University of Florence*

***Final Program***

Under the auspices of



**Dear Colleagues,**

*since the first meeting on Dysplasia of the Cerebral Cortex and Epilepsy, held in Pisa in 1994, it has become obvious that focal cortical dysplasia is the main cause of intractable focal epilepsy both in children and in adults.*

*A relevant number of issues have been clarified concerning histopathological classification, imaging, epileptogenesis, and results of surgical treatment.*

*Despite this, for many patients only limited or no improvement can be obtained because either the eloquent cortex is involved, the dysplastic cortex is not visible on imaging or the clinical presentation is too complex and proper assessment impossible.*

*Recent advances in ultra high field imaging and electrophysiology might, however, help to overcome current limitations and allow a higher number of patients to be properly treated. A relevant amount of information has also been gathered concerning nonsurgical approaches to the treatment of epilepsy in FCD.*

*We felt that organizing a meeting with a focus on treatment issues would be timely and useful for stimulating cross links amongst experts who are approaching this topic from different perspectives.*

**Renzo Guerrini**

**Michael Duchowny**



## **Chairpersons**

**Michael Duchowny**  
**Renzo Guerrini**

## **Scientific Board**

**Helen Cross**  
**Jean Gotman**  
**Prasanna Jayakar**  
**Philippe Kahane**  
**Laura Tassi**

## **Local Organizing Committee**

**Carmen Barba**  
**Flavio Giordano**  
**Renzo Guerrini**  
**Federico Melani**

## **List of Invited Speakers and Chairpersons**

<b>Veronique M. Andre</b>	Los Angeles, Ca, USA
<b>Carmen Barba</b>	Firenze, Italy
<b>Fabrice Bartolomei</b>	Marseille, France
<b>Andrea Bernasconi</b>	Montreal, Canada
<b>Ingmar Blumcke</b>	Erlangen, Germany
<b>Carlos Cepeda</b>	Los Angeles, Ca, USA
<b>Francine Chassoux</b>	Paris, France
<b>Mirco Cosottini</b>	Pisa, Italy
<b>Helen Cross</b>	London, UK
<b>Olivier Delalande</b>	Roma, Italy
<b>Bertrand Devaux</b>	Paris, France
<b>Michael Duchowny</b>	Miami, Fl, USA
<b>Stefano Francione</b>	Milano, Italy
<b>Flavio Giordano</b>	Firenze, Italy
<b>Jean Gotman</b>	Montreal, Canada
<b>Renzo Guerrini</b>	Firenze, Italy
<b>Hans Holthausen</b>	Vogtareuth, Germany
<b>Prasanna Jayakar</b>	Miami, Fl, USA
<b>Philippe Kahane</b>	Grenoble, France
<b>Pavel Krsek</b>	Prague, Czeck Republic
<b>Darcy A. Krueger</b>	Cincinnati, Oh, USA
<b>Federico Melani</b>	Firenze, Italy
<b>Ian Miller</b>	Miami, Fl, USA
<b>Imad Najm</b>	Cleveland, Oh, USA
<b>Tilman Polster</b>	Bethel, Germany
<b>Philippe Ryvlin</b>	Lyon, France
<b>Roberto Spreafico</b>	Milano, Italy
<b>Hermann Stefan</b>	Erlangen, Germany
<b>Laura Tassi</b>	Milano, Italy
<b>Kristl Vonck</b>	Gent, Belgium

## Introduction

09:00 Introduction: Seizure-freedom in patients with FCD:  
the holy grail of treatment  
*Michael Duchowny, Renzo Guerrini*

## Session I - Why is FCD treatment-resistant?

09:15 - 09:45 Cellular histopathology of FCD - clues to epileptogenicity  
*Ingmar Blumcke*

09:45 - 10:15 Outcome in relation to histopathology  
*Pavel Krsek*

10:15 - 10:45 Intrinsic hyperexcitability of dysplastic tissue - are the  
features unique?  
*Philippe Kahane*

10:45 - 11:15 Dysplastic neural networks and the problem of localization  
*Michael Duchowny*

11:15 - 11:30 Coffee break

11:30 - 12:00 FCD and Dual Pathologies - Double trouble?  
*Laura Tassi*

12:00 - 12:30 Co-localization of FCD and eloquent cortical regions:  
challenges, strategies and relationship to surgical failure  
*Prasanna Jayakar*

12:30 - 13:00 Life threatening FCD  
*Federico Melani*

### 13:00 - 13:30 Panel discussion

Is epilepsy associated with FCD uniquely different from other etiologies? (TBD)

13:30 - 14:30 Working Lunch



**Thursday, June 6<sup>th</sup>**

## Session II - Medical Therapy of FCD

- 14:30 - 15:00 Response of FCD to AED treatment in clinical trials  
*Tilman Polster*
- 15:00 - 15:30 What do we know about synaptic responses in FCD?  
Any insight towards targeted AED treatment?  
*Veronique M. André*
- 15:30 - 16:00 Experimental AEDs: are potential agents for FCD on the horizon?  
*Carlos Cepeda*
- 16:00 - 16:15 Coffee break
- 16:15 - 16:45 Everolimus : a drug for FCD?  
*Darcy A. Krueger*
- 16:45 - 17:15 Alternative therapies for FCD (ketogenic diet)  
*Helen Cross*
- 17:15 - 17:45 Panel discussion**  
Should we conduct comparative AED trials in FCD?  
Pros and Cons. (TBD)
- 17:45 - 18:30 Evening session**  
Two carefully prepared illustrative case studies of patients with FCD.  
Each case should address a specific aspect of FCD diagnosis  
*Hans Holthausen, Laura Tassi*



Thursday, June 6<sup>th</sup>

## Session III - Diagnostic modalities in FCD

- 09:00 - 09:30 Scalp EEG: Unique features of FCD and diagnostic pitfalls  
*Renzo Guerrini*
- 09:30 - 10:10 Anatomic MR imaging and FCD: What have we learned so far?  
- in vivo and ex-vivo ultra high field MRI studies  
*Mirco Cosottini, Roberto Spreafico*
- 10:10 - 10:40 HFOs and epileptogenic zone  
*Jean Gotman*
- 10:40 - 11:10 fMRI versus invasive cortical mapping  
*Stefano Francione*
- 11:10 - 11:30 Coffee break
- 11:30 - 12:10 Functional Imaging: Role in the pre-surgical evaluation  
✓ Can FDG-PET reduce the need for invasive recordings?  
*Francine Chassoux*  
✓ Neuroreceptor PET and SPECT  
*Philippe Ryvlin*
- 12:10 - 12:40 Invasive EEG recording: Why is surgical outcome still not equal  
to other etiologies?  
*Fabrice Bartolomei*
- 12:40 - 13:10 Panel discussion**  
What is the optimal work-up of FCD?  
*Laura Tassi*
- 13:10 - 14:10 Working Lunch

Friday, June 7<sup>th</sup>



## Session IV - Novel techniques for evaluating FCD and improving outcome

14:10 - 14:40 Imaging processing methods  
*Andrea Bernasconi*

14:40 - 15:10 EEG fMRI  
*Jean Gotman*

15:10 - 15:40 MEG and EEG Source Localization  
*Hermann Stefan*

15:40 - 16:00 Coffee break

16:00 - 16:30 Digital Co-registration and Image Fusion  
*Ian Miller*

16:30 - 17:00 Multi-modal evaluation: Is it always required?  
*Carmen Barba*

### 17:00 - 17:30 Panel discussion

Analysis of the level of evidence: pathways for the future  
*Michael Duchowny*

### 17:30 - 18:15 Evening session

Two carefully prepared illustrative case studies of patients with FCD.

Each case should address a specific aspect of FCD treatment  
*Hermann Stefan*



Friday, June 7<sup>th</sup>



## Session V - Surgical perspective on FCD

- 09:00 - 09:30 What information should the surgeon receive from the medical team?  
*Bertrand Devaux*
- 09:30 - 10:00 Resection of dysplastic tissue: Less or more?  
*Olivier Delalande*
- 10:00 - 10:30 Surgical therapy for FCD in proximity to eloquent cortex  
*Imad Najm*
- 10:30 - 11:00 Minimizing postoperative complications after surgery for FCD  
*Flavio Giordano*
- 11:00 - 11:30 Brunch
- 11:30 - 12:30 Neurostimulation in FCD  
*Kristl Vonck*
- 12:30 - 13:00 Panel discussion**  
Where do we go from here?  
*Hermann Stefan*
- 13:00 - 13:15 Conclusions**  
*Michael Duchowny - Renzo Guerrini*

**Saturday, June 8<sup>th</sup>**



## Workshop Venue

Children's Hospital A. Meyer – University of Florence  
Viale Gaetano Pieraccini, 24 50141 Firenze

## Official language

The official language of the workshop is English.  
No simultaneous translation will be provided

## CME – Provider PTS n°. 1293 (for Italian delegates only)

All'evento sono stati assegnati 19 crediti per le seguenti discipline: Anatomia Patologica, Genetica Medica, Neurochirurgia, Neurologia, Neurofisiopatologia, Neuropsichiatria Infantile, Neuroradiologia e Pediatria.

Per l'ottenimento dei Crediti formativi si debbono osservare le seguenti norme:

- ritirare e compilare (in ogni sua parte) la scheda che verrà consegnata dal personale all'ingresso (schede riconsegnate incomplete non verranno prese in considerazione) Tale scheda riporterà i dati anagrafici, il modulo di valutazione dell'evento e il questionario
- riconsegnare la scheda formativo
- garantire il 100% della propria presenza

## Organizing Secretariat



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## Registration fees - VAT included

**From March 31<sup>st</sup> 2013**

Standard Registrants € 250,00

Young Registrants (up to 35 years-old) € 210,00

One day Standard Registrants € 110,00

One day Young Registrants € 90,00

## Registration fees include

- o Admission to the scientific sessions
- o Certificate of attendance
- o CME credits for Italian attendees only
- o Coffees and lunches as indicated in the programme



**General Information**

**The Organizing Committee gratefully thanks the support of**

**UCB PHARMA USA**

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