

## General information

The venue of the conference is Comwell Korsør which is located in Ørnumvej 6, 4220 Korsør (Denmark). The conference will start on May 14th, 2020 at 8:45 and will end on May 15th, 2020 at 15:30.

We encourages all participants to consider contributing to the program by submitting abstracts for poster presentation. A limited number of abstracts will be selected for platform presentation in the late-breaking news session. Abstracts (up to 250 words) can be send to [genetics@filadelfia.dk](mailto:genetics@filadelfia.dk) before April 1th 2020.

Comwell Korsør is about 1.4 km from Korsør railway station. Korsør can be reached by train from Copenhagen Central Station (about 70 minutes). Highway E20 connects Korsør to Copenhagen (about 1 hour drive).

Rooms are available for the participants at Comwell Korsør and they can be included in the registration. Accommodation at the conference venue can be guaranteed if you register before May 1th 2020.

Registration fees:

€ 500: full meeting incl. conference dinner (14.05.2020) and 2 nights (13-15.05.2020)

€ 400: full meeting incl. conference dinner (14.05.2020) and 1 night (14.05.2020)

€ 300 – full meeting incl. conference dinner (14.05.2020)

€ 150 – one day registration

Registration fees: has to be paid on bank account:

Danske Bank  
Card holder: Filadelfia  
Address: Torvet 6, 4100 Ringsted (Denmark)  
Account n. 4343 0006406319  
IBAN: DK45 3000 0006 4063 19  
SWIFT-BIC: DABADKKK.

Please report in the payment your name and the title of the conference.

Please send the filled registration form to the attention of Alice Bøjlund Lyseen:  
[genetics@filadelfia.dk](mailto:genetics@filadelfia.dk)

## Faculty

Eleonora Aronica (The Netherlands)  
Berten Ceulemans (Belgium)  
Elena Gardella (Denmark)  
Renzo Guerrini (Italy)  
Henrike Heyne (Finland/USA)  
Christina Høi-Hansen (Denmark)  
Katrine M. Johannesen (Denmark)  
Johannes Lemke (Germany)  
Holger Lerche (Germany)  
Rikke S. Møller (Denmark)  
Marina Nikanorova (Denmark)

Steven Petrou (Australia)  
Annapurna Poduri (USA)  
Guido Rubboli (Denmark)  
José Serratosa (Spain)  
Sanjay Sisodiya (UK)  
Nicola Specchio (Italy)  
Joseph Symonds (UK)  
Steffen Syrbe (Germany)  
Maurizio Tagliatela (Italy)  
Sarah Weckhuysen (Belgium)

## For more information

Visit: [www.filadelfia.dk/dice2020](http://www.filadelfia.dk/dice2020)



FILADELFIA

**Precision medicine in genetic epilepsies**  
- where are we now, and where are we heading?

4th Dianalund International Conference on Epilepsy

### Organizing Committee:

FILADELFIA  
Alice B. Lyseen, secretary  
[genetics@filadelfia.dk](mailto:genetics@filadelfia.dk)

### Comwell:

Adress: Ørnumvej 6  
DK-4220 Korsør - Denmark  
Phone : +45 58 350 110



## Dear participants

It is our great pleasure to invite you to the 4th Dianalund International Conference on Epilepsy. The topic of the conference is: Precision medicine in genetic epilepsies – where are we now, and where are we heading? We hope that you'll be able to join us, and we are looking forward welcoming you in Denmark.

## Introduction

Treatment of epilepsy remains largely empirical, and individual prescribing based on the mechanism of action is generally not possible. However, recent findings in genetic epilepsies have elucidated some mechanisms of epileptogenesis, unravelling the role of a number of genes with different functions, such as ion channels, proteins associated to the vesical synaptic cycle or involved in energy metabolism. The advent of Next Generation Sequencing is providing precision genetics enabling precision medicine in approximately one quarter of patients, illustrating the enormous utility of genetic testing for therapeutic decision-making. Although any patient with refractory epilepsy may benefit from genetic screening, such testing will be of most importance in patients with early-onset seizures (less than 3 years of age), a family history of seizures, associated neurological deficit, or learning intellectual disability. A major goal of the genetic studies is the identification of novel drug targets and tailored therapies based on the cause of disease. The discovery of specific genetic mutations has also helped us to repurpose drugs with specific actions which may have been used in entirely unrelated conditions.

In this conference, clinicians, geneticists and basic scientists aim to provide an updated overview of the state-of-the art of precision medicine in those genetic epilepsies in which a precision medicine approach has been already implemented, or in which promising data are under evaluation. Within the next future, precision medicine will hopefully move within the reach of more patients, and as genetic technologies advance, a comprehensive approach informed also of the contribution of genetics in treatment choices will become an increasingly important part of the clinical management of the epilepsy patients.

## Scientific Committee

Rikke S. Møller, assoc. professor  
Elena Gardella, assoc. professor  
Johannes Lemke, professor  
Guido Rubboli, professor

## Organizing Committee

Alice B. Lyseen, secretary

## 14 May 2020

- 8:45 - 9:00 Presentation of the conference:  
Mads Ravnborg (Denmark)
- 9:00 - 9:45 **Lecture:** Precision medicine in the epilepsy clinic, state of the art 2020. Renzo Guerrini (Italy)
- 9:45 - 10:15 An old drug for a new indication: Repurposing Fenfluramine from anorexigen to AED. Berten Ceulemanns (Belgium)
- 10:15 - 10:45 *SCN2A*: From genotype-phenotype correlations to personalized treatment. Katrine Johannesen (Denmark)
- 10:45 - 11:15 *Coffee break*
- 11:15 - 11:45 *SCN8A*: current and emerging treatments. Elena Gardella (Denmark)
- 11:45 - 12:15 Predicting Functional Effects of Missense Variants in Voltage-Gated Sodium and Calcium Channels. Henrike Heyne (USA)
- 12:15 - 13:15 Lunch
- 13:15 - 13:35 Clinical overview and treatment responsiveness in *KCNT1*-Related Epilepsy. Guido Rubboli (Denmark)
- 13:35 - 14:20 **Lecture:** ASO therapies in genetic epilepsies: insights from *SCN2A* and *KCNT1*. (Steve Petrou) (Australia)
- 14:20 - 14:50 Targeted treatment for *KCNQ2* encephalopathy: recent developments and pitfalls. Sarah Weckhuysen (Belgium)
- 14:50 - 15:50 *Coffee break* + posters
- 15:50 - 16:20 Repurposing of drugs: insights from *KCNA2*. Holger Lerche (Germany)
- 16:20 - 16:50 Cellular models for drug screening - what can we learn? Maurizio Tagliatela (Italy)
- 16:50 - 18:30 **"Late-breaking News"**  
(speakers to be announced)
- 19:30 Dinner

## 15 May 2020

- 8:30 - 9:15 **Lecture:** Precision Medicine - Lessons from Early N of 1 Experiences. Ann Poduri (USA)
- 9:15 - 9:45 GRIN-related disorders – difficulties in translating promising treatment approaches into successful patient care. Johannes Lemke (Germany)
- 9:45 - 10:05 The mTOR pathway in treatment of epilepsy. Christina Høi-Hansen (Denmark)
- 10:05 - 10:35 Genetic findings in brain specimens: From Histology to an "Integrated" diagnostic approach. Eleonora Aronica (The Netherlands)
- 10:35 - 11:15 *Coffee break*
- 11:15 - 11:35 Ganaxolone treatment in females with *PCDH19*-related epilepsy. Marina Nikanorova (Denmark)
- 11:35 - 11:55 *CLN2*: enzyme replacement therapy. Nicola Specchio (Italy)
- 11:55 - 12:15 New therapeutic strategies for the treatment of Lafora disease. Jose Serratosa (Spain)
- 12:15 - 12:30 Towards ASO-therapy for Angelman syndrome. Johannes Lemke (Germany)
- 12:30 - 13:30 Lunch
- 13:30 - 13:50 Incidence, phenotypes and treatment consequences of childhood-onset genetic epilepsies. Joseph Symonds (UK)
- 13:50 - 14:15 Precision Medicine: What to gain in childhood? Steffen Syrbe (Germany)
- 14:15 - 14:40 Precision Medicine: What to gain in adulthood. Sanjay Sisodiya (UK)
- 14:40 - 15:00 The path forward. Rikke Møller (Denmark)