34th International Epilepsy Congress

28 August - 1 September 2021

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Saturday 28 August

Sunday 29 August

Monday 30 August

Tuesday 31 August

Wednesday 1 September

Industry Sessions

Note: Session details are correct at time of publication but are subject to change up to the time of the congress
Saturday 28 August

12:00-21:00 CEST  Room D

**Neuroimaging**

**Full-Day Teaching Course: Neuroimaging in epilepsy – what the clinician should know**

Chair: Paolo Federico (Canada)

- Introduction to neuroimaging in epilepsy - Paolo Federico (Canada)
- MRI physics, sequence names, and MRI epilepsy protocol - Boris Bernhardt (Canada)
- Common epileptic pathologies: temporal epilepsy - Neda Bernasconi (Canada)
- Common epileptic pathologies: extratemporal lobe epilepsy - Fernando Cendes (Brazil)
- Hands-on session 1 - Paolo Federico (Canada), Andrea Bernasconi (Canada), Boris Bernhardt (Canada), Lorenzo Caciagli (USA), Fernando Cendes (Brazil), Yotin Chinvarun (Thailand), Luis Concha (Mexico), Neda Bernasconi (Canada), Victoria Morgan (USA), Stefan Rampp (Germany), Anna Elisabetta Vaudano (Italy), Irene Wang (USA), Shuang Wang (China), Graeme Jackson (Australia)
- MRI-negative epilepsy. What are the next steps? - Andrea Bernasconi (Canada)
- Other neuroimaging modalities: PET, SPECT - Yotin Chinvarun (Thailand)
- fMRI (task-based) and EEG-fMRI - Anna Elisabetta Vaudano (Italy) & Graeme Jackson (Australia)
- Hands-on session 2 - Paolo Federico (Canada), Andrea Bernasconi (Canada), Boris Bernhardt (Canada), Lorenzo Caciagli (USA), Fernando Cendes (Brazil), Yotin Chinvarun (Thailand), Luis Concha (Mexico), Neda Bernasconi (Canada), Victoria Morgan (USA), Stefan Rampp (Germany), Anna Elisabetta Vaudano (Italy), Irene Wang (USA), Shuang Wang (China), Graeme Jackson (Australia)
- Group discussion/feedback - Paolo Federico (Canada), Andrea Bernasconi (Canada), Boris Bernhardt (Canada), Lorenzo Caciagli (USA), Fernando Cendes (Brazil), Yotin Chinvarun (Thailand), Luis Concha (Mexico), Neda Bernasconi (Canada), Victoria Morgan (USA), Stefan Rampp (Germany), Anna Elisabetta Vaudano (Italy), Irene Wang (USA), Shuang Wang (China), Graeme Jackson (Australia)

13:30-14:30 CEST  Room A

**Social Issues/Nursing**

**Interactive Session: Self-management in epilepsy: time to incorporate it into your practice**

Chair: Mary Secco (Canada)

- Francesca Sofia (Italy)
- Gus Baker (United Kingdom)
- Natela Okujava (Georgia)

13:30-14:30 CEST  Room B

**Epilepsy Surgery / Neurostimulation**

**Interactive Session: Neurostimulation and minimally invasive techniques**

Co-Chairs: Dario Englot (USA) & Bertil Rydenhag (Sweden)

- Open loop hippocampal stimulation for epilepsy - Arthur Cukiert (Brazil)
- Closed loop VNS for epilepsy: outcomes and future directions - Michal Tzadok (Israel)
- Closed loop thalamic stimulation for epilepsy - Rushna Ali (USA)

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Saturday 28 August

13:30-14:30 CEST  
**Psychiatry & Neuropsychology**  
**Interactive Session:** Psychotherapy for psychogenic nonepileptic seizures after the CODES trial: where next?  
*Chair:* Markus Reuber (United Kingdom)  
- Key outcome of the CODES trial of CBT and standardised medical care versus standardised medical care for patients with dissociative seizures - Markus Reuber (United Kingdom)  
- Psychotherapy for PNES: one for all or all for one? - Roderick Duncan (New Zealand)  
- How to secure an evidence base for psychotherapy for PNES? - W Curt LaFrance (USA)  
- What outcomes are the most important in the treatment of PNES? - Ali Asadi-Pooya (Iran)  
- Psychological interventions for populations with limited access to health care resources - Chrisma Pretorius (South Africa)  
- Patient empowerment and personalisation of psychotherapy - Coraline Hingray (France)

13:30-17:30 CEST  
**Drug Therapy**  
**Half-Day Teaching Course:** Pharmacological treatment: starter course  
*Co-Chairs:* Emilio Perucca (Italy) & Torbjörn Tomson (Sweden)  
- Basic and clinical pharmacology - Matthew Walker (United Kingdom)  
- Drug treatment: when to start and when to stop - Terence O’Brien (Australia)  
- Drug selection and titration - Emilio Preucca (Italy)  
- Special populations: women and elderly - Torbjörn Tomson (Sweden)  
- Special populations: infants and children - Elaine Wirrell (USA)

18:00-19:30 CEST  
**Other**  
**Presidential Symposium:** The future of epilepsy care: best practices  
*Co-Chairs:* Samuel Wiebe (Canada) & Martin Brodie (Scotland)  
- Welcome - Martin Brodie (Scotland)  
- Responsible telemedicine in epilepsy: challenges and best practices - Josephine Chan (Australia)  
- Wearables in epilepsy: what is their role in telemedicine? - Sándor Beniczky (Denmark)  
- Using videos of patient-recorded seizures: The future for seizure diagnosis? - Sameer Zuberi (United Kingdom)  
- Patient-reported outcome measures in telehealth: an untapped resource for patient care? - Nathalie Jetté (USA)  
- Real world evidence and the patient experience: are we doing it right? - Francesca Sofia (Italy)  
- Panel discussion

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Saturday 28 August

18:00-22:00 CEST  Room E

**Diagnosis**

**Half-Day Teaching Course: Epilepsy diagnosis**

*Co-Chairs: Walter van Emde Boas (Netherlands) & Peter Wolf (Denmark)*

- Is this seizure? Recognising and classifying seizures from patient history and from video recordings - Peter Wolf (Denmark) & Walter van Emde Boas (Netherlands)
- Localising focal seizures based on patient history and video recordings - Philippe Kahane (France)
- Aetiologies according to the age of onset - Michael Sperling (USA)
- Epilepsy syndromes - Tiziana Granata (Italy)

20:00-21:00 CEST  Room A

**Basic Sciences**

**Neurobiology Symposium: Neurobiology of SARS-CoV-2 / COVID-19 and relevance to epilepsy**

*Chair: Aristea Galanopoulou (USA)*

- Neurobiology and neuroinvasion of SARS-CoV-2 - Eric Song (USA)
- Neuropathology and inflammatory response in COVID-19 - Marianna Bugiani (Netherlands)
- Coagulation, neurovascular unit, blood brain barrier: breaking down a link between COVID-19 and seizures? - Nicola Marchi (France)
- COVID-19 and seizures: is there a link? - Victor Ferastraoaru (USA)

20:00-21:00 CEST  Room B

**Adult Epileptology**

**Paediatric epileptology**

**Interactive Session: Key aspects of transitioning your patients from pediatric to adult care**

*Chair: Danielle Andrade (Canada)*

- Introduction of the goals of ILAE Transitions from Child to Adult Care Task Force - Danielle Andrade (Canada)
- Key aspects of transition - Rima Nabbout (France)
- Case presentation: Young patient with Juvenile Myoclonic Epilepsy: her transition issues - Jaime Carrizosa (Colombia)
- Case presentation: Young patient with developmental and epileptic encephalopathy - Danielle Andrade (Canada)

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Saturday 28 August

20:00-21:00 CEST Room C

Neuroimaging
Interactive Session: Is this a spike? Or not? Operational criteria for epileptiform EEG discharges

Chair: Sándor Beniczky (Denmark)
- Is this a spike? Or not? Operational criteria for epileptiform EEG discharges - Sándor Beniczky (Denmark)
- Showing EEGs - Fabio Nascimento (USA)
- Showing EEGs - Mustafa Aykut Kural (Denmark)
Sunday 29 August

09:00-10:00 CEST  Room A

**Parallel Session: Can we predict the efficacy of epilepsy therapy in individual patients?**

*Co-Chairs: Milan Brázdil (Czech Republic) & Colin Josephson (Canada)*

- AI meets drug treatment, the future begins now - Margitta Seeck (Switzerland)
- The virtual brain predicting epilepsy surgery outcomes and protecting brains - Viktor Jirsa (France)
- Prediction of individual neurostimulation efficacy in intractable epilepsy - dreams or reality? - Milan Brázdil (Czech Republic)
- From 'trial and error' to personalised care of epilepsies - Patrick Kwan (Australia)

09:00-10:00 CEST  Room B

**Teaching Course: EEG source imaging virtual workshop**

- EEG source imaging - Sándor Beniczky (Denmark)
- EEG source imaging - Stefan Rampp (Germany)

09:00-10:00 CEST  Room C

**Interactive Session: Epilepsy: from big data to better data**

*Chair: Samden Lhatoo (USA)*

- Phenotyping epilepsy – progress and pitfalls - Samden Lhatoo (USA)
- Better data – lessons from the Human Brain Project - Philippe Ryvlin (Switzerland)
- Genotype and precision epileptology - Sam Berkovic (Australia)
- Collaborative imaging of epilepsy – lessons for better data - Sanjay Sisodiya (United Kingdom)
- Long data – seizure cycles and seizure forecasting - Vikram Rao (USA) & Maxime Baud (France)

09:00-10:00 CEST  Room D

**Interactive Session: Treatment of young children with epilepsy : OFF label use ON the table**

*Chair: Lieven Lagae (Belgium)*

- Development of anti-seizure drugs in young children: current state and future directions - Stéphane Auvin (France)
- Presentation and Discussion: Results of international ILAE survey on first and second line drugs in typical epilepsy syndromes in young children - Jo Sourbron (Netherlands) & Lieven Lagae (Belgium)

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Sunday 29 August

10:30-12:00 CEST

Presidential Symposium (repeat): The future of epilepsy care: best practices

Co-Chairs: Samuel Wiebe (Canada) & Martin Brodie (Scotland)
- Welcome - Martin Brodie (Scotland)
- Responsible telemedicine in epilepsy: challenges and best practices - Josephine Chan (Australia)
- Wearables in epilepsy: what is their role in telemedicine? - Sándor Beniczky (Denmark)
- Using videos of patient-recorded seizures: The future for seizure diagnosis? - Sameer Zuberi (United Kingdom)
- Patient-reported outcome measures in telehealth: an untapped resource for patient care? - Nathalie Jetté (USA)
- Real world evidence and the patient experience: are we doing it right? - Francesca Sofia (Italy)
- Panel discussion

11:30-12:30 CEST

ILAE YES Career Development Session: Effective scientific communication: from securing funding to engaging the public
- Effective scientific communication: from securing funding to engaging the public - Jackie Ashley (United Kingdom)

12:30-13:00 CEST

Award Symposium: Epilepsia Prize – Basic Science

Co-Chairs: Astrid Nehlig (France) & Michael Sperling (USA)
- Progressive cardiorespiratory dysfunction in Kv1.1 knockout mice may provide temporal biomarkers of pending sudden unexpected death in epilepsy (SUDEP): The contribution of orexin - Shruthi Iyer (USA)

12:30-13:00 CEST

Award Symposium: Epilepsia Open Prize – Clinical Science

Chair: Aristea Galanopoulou (USA)
- Impact of diagnostic delay on seizure outcome in newly diagnosed focal epilepsy - Laura Parviainen (Finland)

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Sunday 29 August

12:30-13:00 CEST  Room C

**Basic Sciences**

**Award Symposium: Michael Prize Lecture**

*Chair: Bettina Schmitz (Germany)*

- Towards DNA methylation-based disease classification in focal epilepsy - Katja Kobow (Germany)

13:00-14:00 CEST  Room F

**Other**

**ILAE YES Brainstorming Session: NORSE: New Onset Refractory Status Epilepticus**

*Moderator: Ruta Yardi (USA)*

- NORSE: New Onset Refractory Status Epilepticus - Nicolas Gaspard (Belgium)

13:30-14:30 CEST  Room A

**Adult Epileptology**  **Paediatric epileptology**  **Other**

**Parallel Session: What's new in epilepsy syndromes?**

*Co-Chairs: Elaine Wirrell (USA) & Paolo Tinuper (Italy)*

- Introduction: brief case presentation: ~2 yo child with SCN1A spectrum presentation – need to focus on etiology and syndrome to choose best therapy (and possible precision therapy) - Joseph Symonds (United Kingdom)
- Genetic and idiopathic generalized epilepsy syndromes: are these terms synonymous? - Ingrid Scheffer (Australia)
- What’s new in infant/child syndromes? - Stéphane Auvin (France)
- What’s new in teen/adult/variable-aged syndromes? - Alicia Bogacz (Uruguay)
- The future: etiology and syndrome OR etiology-specific syndrome? - Elaine Wirrell (USA)

13:30-14:30 CEST  Room B

**Adult Epileptology**  **Comorbidities**

**Parallel Session: Post stroke epilepsy - Predict! Protect. Prevent?**

*Co-Chairs: Alla Guekht (Russian Federation) & Marian Galovic (Switzerland)*

- Prediction tools for post-stroke epilepsy - Carla Bentes (Portugal)
- AEDs and stroke prevention drugs: preferences and pitfalls - Alla Guekht (Russian Federation)
- Epileptogenesis in PSE? - Asla Pitkänen (Finland)
- Epileptogenicity after stroke - any chance to protect? - Eugen Trinka (Austria)

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Sunday 29 August

13:30-14:30 CEST  
**Drug Therapy**  
Room C

**Case-based Discussion: Using antiseizure medicines optimally. YES or no?**

*Co-Chairs: Martin Brodie (Scotland) & Emilio Perucca (Italy)*

- What treatment and what doses? Risk and benefits of antiseizure medication in a young woman with refractory epilepsy secondary to bilateral periventricular nodular heterotopias (PVNH) - Simona Balestrini (United Kingdom)
- Antiseizure medications and novel oral anticoagulants: should we optimize neurological, or cardiological drugs or both? - Margherita Contento (Italy)
- Starting treatment in a patient with a diagnosis of seizure disorder associated with MS - Anca Arbune (Romania)
- Epilepsy and forced normalization: optimizing management - Fabrizio Rinaldi (Italy)
- A challenging case of idiosyncratic adverse reactions to multiple antiseizure medications - Lili Long (China)
- Successful management of an infant with drug resistant epilepsy - Sebastian Ortiz de la Rosa (Colombia)

13:30-14:30 CEST  
**Epilepsy in special groups**  
Room D

**Interactive Session: Case studies in pregnancy and epilepsy**

*Chair: Kimford Meador (USA)*

- Case related to pre-pregnancy counselling and management - Torbjörn Tomson (Sweden)
- Case related to management of epilepsy in pregnancy and postpartum - Page Pennell (USA)
- Case related to important unanswered questions and needed future research - Piero Perucca (Australia)

13:30-14:30 CEST  
**Basic Sciences**  
Room E

**Platform Session: Basic sciences**

*Chair: Cristina Ruedell Reschke (Ireland)*

- Activity-dependent Gene Therapy for Intractable Epilepsy - Gabriele Lignani (United Kingdom)
- Non-cell autonomous hyperexcitability underlies focal epileptogenesis mediated by low-level brain somatic mutations in MTOR - Hyunyong Koh (USA)
- Robust chronic convulsive seizures, high-frequency oscillations, and human seizure onset patterns in an intrahippocampal kainic acid model in mice - Christos Lisgaris (USA)
- Adenovirus-mediated expression of NaV1.1 ameliorates Dravet syndrome epilepsy in mice - Saja Fadila (Israel)

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Sunday 29 August

15:00-16:30 CEST  
**Clinical Neurophysiology  Epilepsy Surgery  Neuroimaging**

**Main Session: Cutting edge diagnostic methods in epilepsy: seizure onset zone**

*Co-Chairs: Fabrice Bartolomei (France) & Hui Ming Khoo (Japan)*
- From quantification to modelling of the seizure onset zone - Julia Scholly (France)
- The role of neuroimaging in the definition of the seizure onset zone - Fernando Cendes (Brazil)
- What role for subcortical regions in the genesis and propagation of focal seizures? - Ren Liankun (China)
- How HFO and spikes may help to define the seizure onset zone? - Julia Jacobs (Canada)

15:00-16:30 CEST  
**Genetics**

**Main Session: Epilepsy genetics: a global perspective**

*Co-Chairs: Holger Lerche (Germany) & Iscia Lopes-Cendes (Brazil)*
- Overview and clinical implications of genetic findings - Heather Mefford (USA)
- Role of common and rare genetic variants - Gianpiero Cavalleri (Ireland)
- Genetic informatics for the busy clinician — now and the future - Ingo Helbig (USA)
- Perspectives of gene therapy - Steven Petrou (Australia)

18:30-19:30 CEST  
**Terminology and Classification**

**Parallel Session: Breakthroughs in focal cortical dysplasia: the ILAE classification update 2021**

*Co-Chairs: Imad Najm (USA) & Cristina Ruedell Reschke (Ireland)*
- Genetics of focal cortical dysplasia - Stéphanie Baulac (France)
- DNA methylation classifier of FCD subtypes - Katja Kobow (Germany)
- Humanized animal models of FCDs: opportunities for translational studies - Jeong Ho Lee (Korea, Rep. of South)
- Electroencephalographic-imaging fingerprints of FCDs - Imad Najm (USA)

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Sunday 29 August

18:30-19:30 CEST Room C

**Status Epilepticus**

**Parallel Session: Status epilepticus – new concepts and novel therapies (part 1)**

*Chair: Eugen Trinka (Austria)*

- Molecular and cellular mechanism in status epilepticus - *Karen Wilcox (USA)*
- Uncommon and rare causes of status epilepticus - *Nicolas Gaspard (Belgium)*

18:30-19:30 CEST Room D

**Paediatric epileptology**

**Parallel Session: Neonatal update**

*Co-Chairs: Ronit Pressler (United Kingdom) & Perrine Plouin (France)*

- Classification of seizures and epilepsy syndromes in neonates - *Ronit Pressler (United Kingdom)*
- Genetics of neonatal onset epilepsy syndromes - *Sarah Weckhuysen (Belgium)*
- Treatment of neonatal seizures revisited - *Jo Wilmshurst (South Africa)*

18:30-19:30 CEST Room E

**Diagnosis**

**Epilepsy Surgery**

**Debate: Do we need to record seizures to know where they are coming from?**

*Chair: Maeike Zijlmans (Netherlands)*

- It is critical to record the seizure onset to ensure surgical success - *Philippe Kahane (France)*
- It is not possible to be sure that the seizure onset has been recorded and we do not need to know - *Jean Gotman (Canada)*

19:00-20:00 CEST Room B

**Other**

**Parallel Session: Multifaceted aspects of sleep and epilepsy**

*Co-Chairs: Sofia Eriksson (United Kingdom) & Birgit Frauscher (Canada)*

- Sleep improves identification of the epileptogenic zone - *Birgit Frauscher (Canada)*
- Anatomo-electroclinical features of sleep related hypermotor seizures and parasomnias - *Lino Nobili (Italy)*
- Genetics of sleep related epilepsies - *Stéphanie Baulac (France)*
- Specific management of sleep-related epilepsies - *Sofia Eriksson (United Kingdom)*

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Monday 30 August

09:00-10:00 CEST Room A

**Status Epilepticus**

Parallel Session: Status epilepticus – new concepts and novel therapies (part 2)

*Chair: Eugen Trinka (Austria)*

- Neuroimaging of status epilepticus – making the invisible visible - *Pilar Bosque Varela (Austria)*
- Novel treatments for refractory and super refractory status epilepticus - *Matthew Walker (United Kingdom)*

09:00-10:00 CEST Room B

**Paediatric epileptology**

Teaching Session: Developmental and epileptic encephalopathies

- Developmental and epileptic encephalopathy: definition and pathophysiology - *Ingrid Scheffer (Australia)*
- Genetic and metabolic investigation: the impact for patients care - *Rima Nabbout (France)*
- Treatment of epileptic encephalopathy - *J Helen Cross (United Kingdom)*

09:00-10:00 CEST Room C

**Neuroimaging Paediatric epileptology**

Teaching Session: VIREPA courses: Sleep and paediatric EEG

- VIREPA courses: Sleep - *Al de Weerd (Netherlands)*
- VIREPA courses: Paediatric EEG - *Monika Eisermann (France)*

10:30-12:00 CEST Room A

**Clinical Neurophysiology Epilepsy Surgery Neuroimaging**

Main Session (repeat): Cutting edge diagnostic methods in epilepsy: seizure onset zone

*Co-Chairs: Fabrice Bartolomei (France) & Hui Ming Khoo (Japan)*

- From quantification to modelling of the seizure onset zone - *Julia Scholly (France)*
- The role of neuroimaging in the definition of the seizure onset zone - *Fernando Cendes (Brazil)*
- What role for subcortical regions in the genesis and propagation of focal seizures? - *Ren Liankun (China)*
- How HFO and spikes may help to define the seizure onset zone? - *Julia Jacobs (Canada)*

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Monday 30 August

10:30-12:00 CEST  
**Genetics**  
**Main Session (repeat): Epilepsy genetics: a global perspective**  
*Co-Chairs: Holger Lerche (Germany) & Iscia Lopes-Cendes (Brazil)*  
- Overview and clinical implications of genetic findings - *Heather Mefford (USA)*  
- Role of common and rare genetic variants - *Gianpiero Cavalleri (Ireland)*  
- Genetic informatics for the busy clinician – now and the future - *Ingo Helbig (USA)*  
- Perspectives of gene therapy - *Steven Petrou (Australia)*  

12:30-13:00 CEST  
**Clinical Neurophysiology**  
**Diagnosis**  
**Award Symposium: Epilepsia Prize – Clinical Science**  
*Co-Chairs: Michael Sperling (USA) & Astrid Nehlig (France)*  
- Machine learning from wristband sensor data for wearable, noninvasive seizure forecasting - *Christian Meisel (Germany)*  

12:30-13:00 CEST  
**Basic Sciences**  
**Award Symposium: Epilepsia Open Prize – Basic Science**  
*Chair: Aristeia Galanopoulou (USA)*  
- COX-2/PGE2 axis regulates hippocampal BDNF/TrkB signaling via EP2 receptor after prolonged seizures - *Ying Yu (USA)*  

12:30-13:00 CEST  
**Paediatric epileptology**  
**Award Symposium: Epileptic Disorders Educational Prize**  
*Chair: Sándor Beniczky (Denmark)*  
- Characterizing Sunflower syndrome: a clinical series - *James Barnett (USA)*  

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13:30-14:30 CEST Room A

**Basic Sciences**

**Parallel Session: Gene therapy for pharmacoresistant epilepsy – principles, opportunities, and pitfalls**

**Co-Chairs: Simona Balestrini (United Kingdom) & Premysl Jiruska (Czech Republic)**

- Pharmacoresistant epilepsy – neurobiological substrates for gene therapy - Merab Kokaia (Sweden)
- Does gene therapy work? Principles and experience from animal studies - Stephanie Schorge (United Kingdom)
- Gene therapy for epilepsy in humans – promises and pitfalls - Renzo Guerrini (Italy)

13:30-14:30 CEST Room B

**Epilepsy Surgery**

**Platform Session: Epilepsy surgery**

**Chair: Bertil Rydenhag (Sweden)**

- Combining Intracranial EEG Measures of Brain Connectivity and Excitability to Plan Epilepsy Surgery in Children - Eleonora Tamilia (USA)
- Prognostic model for withdrawal of anti-seizure medications following epilepsy surgery in adults: a worldwide multicentre study. - Carolina Ferreira-Atuesta (United Kingdom)
- Paediatric epilepsy surgery from 2000 to 2018: have we reached a plateau in seizure freedom rates? - Maria Eriksson (United Kingdom)
- Comparison of the real-world effectiveness of vertical versus lateral functional hemispherotomy techniques for pediatric drug-resistant epilepsy - Alexander Weil (Canada)

13:30-14:30 CEST Room C

**Epidemiology**

**Platform Session: Epidemiology**

**Chair: Churl-Su Kwon (USA)**

- Incidence, severity and outcomes of COVID-19 in elderly people with epilepsy in Moscow: case-control study - Flora Rider (Russian Federation)
- The Global Economic Burden of Epilepsy - Charles Begley (USA)
- Prenatal exposure to antiseizure medication and intrauterine growth restriction in offspring of women with epilepsy - Julie Dreier (Denmark)
- Adult-onset epilepsy is defined by phenotypic clusters with unique comorbidities and risks of death - Colin Josephson (Canada)

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Monday 30 August

13:30-14:30 CEST  
**Neuroimaging**  
**Platform Session:** Neuroimaging  
**Chair:** Anna Elisabetta Vaudano (Italy)  
- Structural covariance network changes in the common epilepsies: a worldwide ENIGMA study - Sara Larivière (Canada)  
- MELD Project: Predictors of lesion location and postsurgical seizure freedom in focal cortical dysplasia (FCD) - Sophie Adler (United Kingdom)  
- Focal hypertrophy in mesial temporal lobe epilepsy - Richard Zubal (Switzerland)  
- Extent of resection and optimal postsurgical memory and seizure outcome in temporal lobe epilepsy: Voxel-wise and numerical analysis - Daichi Sone (United Kingdom)

13:30-14:30 CEST  
**Pandemic Response**  
**Social Issues/Nursing**  
**Platform Session:** Social issues/nursing & Pandemic response  
**Chair:** Jacob Mugumbate (Zimbabwe)  
- The Ottawa Epilepsy Program: region-wide coordinated and community integrated care in the 21st century - Tadeu Fantaneanu (Canada)  
- Employment in people with epilepsy: A cross sectional study - M. H. Holy Chan (Hong Kong)  
- COVID-19 pandemic in Istanbul: Seizure Frequency and Psychosocial Outcomes in Patients with Epilepsy - Kubra Yeni (Turkey)  
- Multi-centre development of a secure, cloud based, patient to clinician, neurology video transfer, classification and management system - Sameer Zuberi (United Kingdom)

15:00-16:30 CEST  
**Epilepsy Surgery**  
**Main Session:** Epilepsy surgery 2021 – state of the art  
**Co-Chairs:** Philippe Ryvlin (Switzerland) & Lara Jehi (USA)  
- Introduction with survey #1 - Lara Jehi (USA)  
- Non-invasive investigations: the optimal work-up - Eugen Trinka (Austria)  
- State-of-the-art StereoEEG: when, why & how - Philippe Rylin (Switzerland)  
- Survey #2 - Lara Jehi (USA)  
- MRI-guided laser-ablation: indications and outcomes - Michael Sperling (USA)  
- Epilepsy surgery in limited-resources settings: is it really different? - Jayanti Mani (India)  
- Is there a future for epilepsy surgery? YES! - Caroline Neuray (United Kingdom)  
- Questions and conclusion - Philippe Ryvlin (Switzerland)

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Monday 30 August

15:00-16:30 CEST Room B

**Adult Epileptology**  **Paediatric epilepsy**  **Social Issues/Nursing**

**Main Session:** Choosing wisely: needs and reality in patient care

*Co-Chairs: Mary Secco (Canada) & Kette Valente (Brazil)*
- Ongoing information and support needs across the lifespan - Mary Secco (Canada)
- Strategies to improve health literacy - Francesca Sofia (Italy)
- Beyond seizure control; thinking outside the box - Kette Valente (Brazil)
- Choosing wisely in resource-restricted settings - Symon Kariuki (Kenya)

18:00-19:00 CEST Room F

**Other ILAE YES Career Development Session:** New skill, upskill or re-skill? Transitioning to alternative career paths

* ILAE YES Brainstorming Session: Real-time EEG analysis and closed-loop of seizures

**Moderator:** Christos Lisgaras (USA)
- Real-time EEG analysis and closed-loop of seizures - Esther Krook-Magnuson (USA)

19:00-20:00 CEST Room F

**Other ILAE YES Brainstorming Session:** Real-time EEG analysis and closed-loop of seizures

**Moderator:** Christos Lisgaras (USA)
- Real-time EEG analysis and closed-loop of seizures - Esther Krook-Magnuson (USA)

18:30-19:30 CEST Room A

**Genetics**

**Parallel Session:** The rollercoaster of epilepsy genetics – what you need to know

*Co-Chairs: Caroline Neuray (United Kingdom) & Karl Martin Klein (Canada)*
- What the clinician needs to know about genetic testing - Saskia Wortmann (Austria)
- New genes in epilepsy – phenotype-genotype correlation - Caroline Neuray (United Kingdom)
- Genetic and metabolic causes of epilepsy – where they overlap - Elaine Murphy (United Kingdom)
- Polygenic risk scores in epilepsy - Dennis Lal (USA)

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Monday 30 August

18:30-19:30 CEST  Room B

**Paediatric epileptology**  **Psychiatry & Neuropsychology**

**Parallel Session: Psychiatric issues in paediatric epilepsy**

*Co-Chairs: Kette Valente (Brazil) & Sharon Whiting (Canada)*

- ADHD and epilepsy: the ILAE consensus on screening, diagnosis, and treatment - *Kirsty Donald (South Africa)*
- A proactive behavioural medicine approach - *Kette Valente (Brazil)*
- Aggressive behavior in adolescents with ID/ASD and epilepsy: When seizure control is not the main complaint - *Michael Kerr (United Kingdom)*

18:30-19:30 CEST  Room C

**Adult Epileptology**  **Paediatric epileptology**  **Status Epilepticus**

**Controversial Discussion: Controversies in epilepsy: Is it autoimmune encephalitis with seizures or is it autoimmune epilepsy?**

*Chair: Christian Bien (Germany)*

- LGI1 encephalitis case that was rendered completely seizure free - *Sarosh Irani (United Kingdom)*
- A case of LGI1 encephalitis that now has epilepsy - *Jeffrey Britton (USA)*
- LGI1 patient who presented with chronic epilepsy and lacked clear additional signs of encephalitis - *Sarosh Irani (United Kingdom)*
- Open discussion/Q&A

18:30-19:30 CEST  Room D

**Epilepsy Surgery**

**Case-based Discussion: Surgical evaluation**

*Chair: Laura Tassi (Italy)*

- Extra temporal case - *Lara Jehi (USA)*
- Lesional case - *Laura Tassi (Italy)*
- Extra temporal non lesional case - *Francesca Pizzo (France)*

18:30-19:30 CEST  Room E

**Epilepsy in special groups**  **Social Issues/Nursing**

**Teaching Session: Counselling patients with epilepsy, caregivers and relatives**

- *Mary Secco (Canada)*
- *Martin Brodie (Scotland)*

*Note: Session details are correct at time of publication but are subject to change up to the time of the congress*
Tuesday 31 August

09:00-10:00 CEST  Room A

Paediatric epileptology
Interactive Session: New neonatal seizure classification: interactive quiz
Chair: Hans Hartmann (Germany)
- Clinical challenges of neonatal seizures - Sudhin Thayyil (United Kingdom)
- Challenges of diagnosing neonatal seizures - Geraldine Boylan (Ireland)
- Introduction to the new classification - Ronit Pressler (United Kingdom)
- Cases, quiz - Vaisakh Krishnan (India) & Hans Hartmann (Germany)

09:00-10:00 CEST  Room B

Adult Epileptology  Paediatric epileptology
Teaching Session Video session: focal seizures
- Philippe Kahane (France)
- Philippe Ryvlin (Switzerland)

09:00-10:00 CEST  Room C

Psychiatry & Neuropsychology
Interactive Session: An international classification of cognitive disorders in epilepsy: the IC CoDE
Chair: Sallie Baxendale (United Kingdom)
- Bruce Hermann (USA)
- Sarah Wilson (Australia)

09:00-10:00 CEST  Room D

Other
Platform Session: Late-breaking abstracts
Chair: Mirja Steinbrenner (Germany)
- Attention and executive deficits differentiate autoimmune TLE caused by limbic encephalitis from TLE of non-autoimmune etiologies - Nadine Conradi (Germany)
- Short-term heart rate variability predicts sudden unexpected death in epilepsy - Shobi Sivathamboo (Australia)
- Epileptogenic network definition through game theory and connectivity dynamics - Karla Ivankovic (Spain)
- Malformation Risk Prediction with Machine Learning Modelling for Pregnant Women with Epilepsy - Tessy Mathew (India)

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Tuesday 31 August

10:30-12:00 CEST

**Epilepsy Surgery**

**Main Session (repeat): Epilepsy surgery 2021 – state of the art**

*Co-Chairs: Philippe Ryvlin (Switzerland) & Lara Jehi (USA)*

- Introduction with survey #1 - Lara Jehi (USA)
- Non-invasive investigations: the optimal work-up - Eugen Trinka (Austria)
- State-of-the-art StereoeEG: when, why & how - Philippe Ryvlin (Switzerland)
- Survey #2 - Lara Jehi (USA)
- MRI-guided laser-ablation: indications and outcomes - Michael Sperling (USA)
- Epilepsy surgery in limited-resources settings: is it really different? - Jayanti Mani (India)
- Is there a future for epilepsy surgery? YES! - Caroline Neuray (United Kingdom)
- Questions and conclusion - Philippe Ryvlin (Switzerland)

10:30-12:00 CEST

**Room B**

**Adult Epileptology**

**Paediatric epileptology**

**Social Issues/Nursing**

**Main Session (repeat): Choosing wisely: needs and reality in patient care**

*Co-Chairs: Mary Secco (Canada) & Kette Valente (Brazil)*

- Ongoing information and support needs across the lifespan - Mary Secco (Canada)
- Strategies to improve health literacy - Francesca Sofia (Italy)
- Beyond seizure control: thinking outside the box - Kette Valente (Brazil)
- Choosing wisely in resource-restricted settings - Symon Kariuki (Kenya)

12:30-13:30 CEST

**Room A**

**Basic Sciences**

**Interactive Session: Toward an understanding of drug resistance in epilepsy**

*Co-chairs: Heidrun Potschka (Germany) & Solomon Moshé (USA)*

- Edward Bertram (USA)
- Matthew Walker (United Kingdom)
- Aristea Galanopoulou (USA)
- Stéphane Auvin (France)
- Luisa Rocha (Mexico)

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Tuesday 31 August

12:30-13:30 CEST  Room B

**Paediatric epileptology**

**Platform Session: Paediatric epileptology 1**

*Chair: Elissa Yozawitz (USA)*

- Telemedicine, health disparities and seizure control in pediatric epilepsy during the COVID-19 pandemic - Michael Kaufman (USA)
- The Role of Neuropeptides in Electrical Status Epilepticus During Slow Sleep - Miray Atacan Yaşgüçlükal (Turkey)
- Post-Operative Outcomes of Epilepsy Surgery in Drug Refractory Pediatric Epilepsy From Western India - Mayur Thakkar (India)
- Severe complications of influenza infection in SCN1A-Dravet syndrome - Katherine Howell (Australia)

12:30-13:30 CEST  Room C

**Clinical Neurophysiology**

**Platform Session: Clinical neurophysiology**

*Chair: Jorge Burneo (Canada)*

- Fully-Automated Spike Detection and Dipole Analysis of Epileptic Magnetoencephalograms Using Deep Learning - Masayuki Hirata (Japan)
- Seizure-onset EEG patterns in malformations of cortical development: a systematic review - Lubna Shakhatreh (Australia)
- Surgery-Related Changes in Sleep Spindle Activity of Children with Drug-Resistant Epilepsy - Assia Chericoni (USA)
- Artificial Intelligence outperforms Quantitative EEG Assessment for Seizure Detection of ICU Patients - Franz Fürbass (Austria)

12:30-13:30 CEST  Room D

**Epilepsy in special groups**

**Platform Session: Epilepsy in special groups**

*Chair: Martin Brodie (Scotland)*

- Point-of-care EEG-video in northern Nigeria emergency rooms (ERs) utilizing community healthcare workers (CHWs) trained in EEG technology - Umar Sabo (Nigeria)
- Using health laws to prioritise epilepsy in resource-restricted settings: an African perspective - Nkandu Nchindila (South Africa)
- Bridging the Childhood Epilepsy Treatment Gap in Africa (BRIDGE): A Cluster Randomized Clinical Trial of Task-Shifted Epilepsy Care. - Aminu Taura (Nigeria)
- Prenatal exposure to antiseizure medication duotherapy and risk of neurodevelopmental disorders - SCAN-AED: a Nordic nationwide cohort study - Marte Helene Bjork (Norway)

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Tuesday 31 August

12:30-13:30 CEST Room E

**Basic Sciences**

**Parallel Session:** Refractory early-life seizures: taking evidence-based insights from basic science into the hands of clinicians

**Co-Chairs:** Shilpa Kadam (USA) & Ronit Pressler (United Kingdom)
- Bumetanide analogues for the treatment of refractory neonatal seizures: past, present and future - Wolfgang Löscher (Germany)
- The challenges of detecting seizure in neonates in NICU which by default makes it hard to optimise treatment protocols - Geraldine Boylan (Ireland)
- Small molecules that restore GABA as a therapeutic target to treat Autism Spectrum Disorder - James Clement (India)

13:30-14:30 CEST Room F

**Other**

**ILAE YES Brainstorming Session:** Choosing a first line antiseizure medication: the SANAD studies in context

**Moderator:** Mirja Steinbrenner (Germany)
- Choosing a first line antiseizure medication: the SANAD studies in context - Anthony Marson (United Kingdom)

14:00-15:00 CEST Room A

**Clinical Neurophysiology** | **Epilepsy Surgery** | **Neuroimaging**

**Parallel Session:** MRI-negative epilepsy: myth or reality with current techniques?

**Co-Chairs:** Aileen McGonigal (France) & Irene Wang (USA)
- Making the invisible visible: the yield of structural MRI - Neda Bernasconi (Canada)
- Localisation yield of SEEG and seizure outcome in MRI-negative epilepsy - Aileen McGonigal (France)
- Functional MRI and connectivity analysis in non-lesional epilepsy - Graeme Jackson (Australia)

14:00-15:00 CEST Room B

**Basic Sciences** | **Genetics** | **Paediatric epileptology**

**Parallel Session:** Towards precision medicine in cortical malformations

**Co-Chairs:** Jean-Bernard Manent (France) & Iscia Lopes-Cendes (Brazil)
- On the way towards AI-based decision support systems - Samir Jabari (Germany)
- Mechanisms of mTOR-induced epilepsy - Lena Nguyen (USA)
- Novel genetic screening techniques in cortical malformations - Jin-Wu Tsai (Taiwan, Rep. of China)
- Epileptogenic networks in cortical malformations - Jean-Bernard Mament (France)

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Tuesday 31 August

14:00-15:00 CEST  
Room C

**Neuroimaging**  
**Psychiatry & Neuropsychology**

**Parallel Session: Looking into the causes of psychogenic nonepileptic seizures: the contribution of imaging studies**

*Co-Chairs: Markus Reuber (United Kingdom) & Kette Valente (Brazil)*

- What imaging studies need to explain: an integrative aetiological model of PNES - [Markus Reuber (United Kingdom)]
- PNES-associated network changes and their significance - [Selma Aybek (Switzerland)]
- PNES and brain developing - insights from studies of young brains? - [Kasia Kozlowska (Australia)]
- PNES: a problem with hardware or software? - [Jerzy Szafarski (USA)]

14:00-15:00 CEST  
Room D

**Psychiatry & Neuropsychology**

**Parallel Session: Suicide and seizures: management in routine clinical care**

*Co-Chairs: Rosa Michaelis (Germany) & Natela Okujava (Georgia)*

- Suicide and ideation in patient with epilepsy: epidemiology and overview - [Rosa Michaelis (Germany)]
- ILAE surveys: suicidality screening, mental health screening and management practices throughout the world - [Milena Gandy (Australia)]
- Examples and tips for best practice: how to talk about suicide in a busy epilepsy clinic - adults - [Marco Mula (United Kingdom)]
- Recognising suicidal ideation in paediatric patients: working with patients and families - [Avani Modi (USA)] & [Janelle Wagner (USA)]

14:00-15:00 CEST  
Room E

**Adult Epileptology**

**Parallel Session: Sex matters - reproductive health in epilepsy**

*Co-Chairs: Oliver Henning (Norway) & Katia Lin (Brazil)*

- Sexual dysfunction in persons with epilepsy - [Oliver Henning (Norway)]
- Treatment of sexual dysfunction - [Gerhard Luef (Austria)]
- Pregnancy and motherhood in epilepsy - [Page Pennell (USA)]
- Relationships and seizure control - [Sarah Wilson (Australia)]

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Tuesday 31 August

15:30-16:30 CEST Room A

**Parallel Session: Central regulation of breathing and arousal systems. An altered interplay in patients at risk of SUDEP?**

**Co-Chairs: Sylvain Rheims (France) & Lisa Bateman (USA)**

- Organisation of networks involved in central regulation of breathing and arousal systems - Sylvain Rheims (France)
- Sleep-disordered breathing in patients with epilepsy and peri-ictal respiratory dysfunction. Is there a relation? - Shobi Sivathamboo (Australia)
- Impaired postictal arousal and ventilation in response to CO2: Role of serotonergic chemoreceptors - George Richerson (USA)

15:30-16:30 CEST Room B

**Parallel Session: The microbiota gut-brain axis and epilepsy: where are we now?**

**Co-Chairs: Astrid Nehlig (France) & Cian McCafferty (Ireland)**

- Introduction to the microbiota gut-brain axis - Astrid Nehlig (France)
- The microbiota gut-brain axis: role in brain excitability and epilepsy - Emilio Russo (Italy)
- Indications for clinical practice / ketogenic diet - Heung Dong Kim (Korea, Rep. of South)
- Gut microbiome and post-traumatic epilepsy - Andrey Mazarati (USA)
- Microbiome and antiseizure drugs: a link for pharmacoresistance? - Patricia Lepage (France)

15:30-16:30 CEST Room C

**Parallel Session: What is epileptogenicity?**

**Co-Chairs: Akio Ikeda (Japan) & Luisa Rocha (Mexico)**

- Ictal and interictal DC shifts: a surrogate marker of epileptogenicity - Akio Ikeda (Japan)
- Modeling of epileptic activity by neuron and glia - Christophe Bernard (France)
- Consequences of demyelination on ictogenesis and epileptogenesis - Marco de Curtis (Italy)
- Neurological insult-induced astrocyte changes contribute to acquired epilepsy - Stefanie Robel (USA)

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Tuesday 31 August

15:30-16:30 CEST Room D

**Clinical Neurophysiology**

**Parallel Session: The new era of implantable EEG**

*Co-Chairs: Troels Wesenberg Kjær (Denmark) & Margitta Seeck (Switzerland)*

- Subcutaneous EEG in ultra-long-term seizure monitoring - Troels Wesenberg Kjær (Denmark)
- The "fit-bit" for the brain forecasts seizures - Mark Cook (Australia)
- Chronic EEG: bringing research and clinic together - Maxime Baud (Switzerland)
- Under reporting and over reporting of seizures - Gregory Worrell (USA)

15:30-16:30 CEST Room E

**Comorbidities**

**Other**

**Parallel Session: Post traumatic epilepsy**

*Co-Chairs: Pablo Casillas-Espinosa (Australia) & Aristea Galanopoulou (USA)*

- Introduction: the challenge and promise of epilepsy therapy development - Terence O’Brien (Australia)
- Pre-clinical biomarkers of epileptogenesis - Asla Pitkänen (Finland)
- Modifying epilepsy once it occurs: can we reverse the progression of epilepsy and its associated cognitive and psychiatric comorbidities? - Pablo Casillas-Espinosa (Australia)
- Post-traumatic epilepsy after TBI: psychosocial elements, risk factors, how it develops and complicates recovery after TBI

17:00-18:00 CEST Room A

**Other**

**Special Session: ILAE - Fred Andermann Lecture in Clinical Epileptology**

*Co-Chairs: Samuel Wiebe (Canada) & J Helen Cross (United Kingdom)*

- Some words about Fred Andermann - François Dubeau (Canada)
- Does epilepsy still exist?: the changing concepts of epilepsy in the last 150 years - Simon Shorvon (United Kingdom)

18:00-19:00 CEST Room F

**Other**

**ILAE YES Career Development Session: ‘How To’ session**

- Revising it right: how to get that paper to the end of the line - Dimitri Kullmann (United Kingdom)

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Tuesday 31 August

18:30-19:30 CEST  Room A

**Adult Epileptology**  **Comorbidities**  **Neuroimaging**  **Psychiatry & Neuropsychology**

**Parallel Session: Is epilepsy a progressive neurodegenerative disease?**

*Co-Chairs: Marian Galovic (Switzerland) & Mark Keezer (Canada)*

- Mental decline in chronic epilepsy: fact or fiction - *Christoph Helmstaedter (Germany)*
- Progressive neurodegeneration in epilepsy measured with serial MRI - *Marian Galovic (Switzerland)*
- Tau protein accumulation and accelerated brain ageing in chronic epilepsy - *Maria Thom (United Kingdom)*
- Silent seizures in Alzheimer’s disease: the interface between epilepsy and dementia - *Alice Lam (USA)*

18:30-19:30 CEST  Room B

**Adult epileptology**  **Basic Sciences**  **Paediatric epileptology**

**Parallel Session: Management of autoimmune epilepsy in the era of biomarkers**

*Co-Chairs: Divyanshu Dubey (USA) & Sarosh Irani (United Kingdom)*

- Antibody biomarkers of acute symptomatic seizures secondary to autoimmune encephalitis and autoimmune epilepsy - *Divyanshu Dubey (USA)*
- Utility of cytokine and chemokine profiles in the diagnosis and management of autoimmune and auto-inflammatory epilepsies - *Eric Payne (Canada)*
- Acute and chronic management of autoimmune syndromes associated epilepsy guided by biomarkers - *Khalil Husari (USA)*

18:30-19:30 CEST  Room C

**Epilepsy in special groups**

**Interactive Session: Facilitating research in resource-poor settings: the Fogarty Program**

*Co-Chairs: Edward Bertram (USA) & Angelina Kakooza-Mwesige (Uganda)*

- Kathleen Michels, Fogarty International Center, NIH (USA)
- Suzan Nadi, Center for Scientific Review, NIH (USA)
- Angelina Kakooza-Mwesige, Makerere University (Uganda)
- Edwin Trevathan, Vanderbilt Institute of Global Health (USA)

18:30-19:30 CEST  Room D

**Drug Therapy**

**Controversial Discussion: Controversies in epilepsy: Are ASMs disease modifying or not?**

*Chair: Sanaz Ahmadi Karvigh (Iran)*

- No - *Emilio Perucca (Italy)*
- Yes - *Jacqueline French (USA)*

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Tuesday 31 August

18:30-19:30 CEST
Room E

Paediatric epileptology Psychiatry & Neuropsychology

Case-based Discussion: Both sides of the coin: considering behavioural disorders when managing epilepsy and vice versa

Co-Chairs: Kette Valente (Brazil) & Stéphane Auvin (France) & Michael Kerr (United Kingdom)

- A boy with typical absence syndrome with total remission after treatment that presents with academic issues and evolves with school refusal - Elaine Wirrell (USA) & Stéphane Auvin (France)
- A 5-year-old child with Dravet syndrome and SCN1A mutation, diagnosed with autism that evolves with aggressive behaviour - Jo Wilmshurst (South Africa) & Jay Salpekar (USA)
- A 15-year-old girl with JME showing low-adherence to treatment. During follow-up, the family reports marijuana use and mood swings - Mary Lou Smith (Canada) & Marco Mula (United Kingdom)

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Wednesday 1 September

09:00-10:00 CEST  Room A

**Clinical Neurophysiology**

**Teaching Session: VIREPA courses: EEG (basic and advanced)**
- VIREPA courses: Basic EEG - Elena Gardella (Denmark)
- VIREPA courses: Advanced EEG - Antonio Valentin (United Kingdom)

09:00-10:00 CEST  Room B

**Adult Epileptology**  **Paediatric epileptology**

**Teaching Session: Video session: generalised seizures**
- Ronit Pressler (United Kingdom)
- Guido Rubboli (Denmark)

10:30-11:30 CEST  Room A

**Status Epilepticus**

**Platform Session: Status epilepticus**

*Chair: Eugen Trinka (Austria)*
- Status epilepticus outcome in patients with and without MRI abnormalities - Pilar Bosque Varela (Austria)
- The 2HELP2B scale is useful to predict the prognosis and development of epilepsy in encephalopathic patients with suspected status epilepticus - Jordi Ciurans Molist (Spain)
- Metformin protects rats against Status Epilepticus associated Cognitive dysfunction by ameliorating neuroinflammation and neuronal death - Sree Lalitha Bojja (India)

10:30-11:30 CEST  Room B

**Paediatric epileptology**

**Platform Session: Paediatric epileptology 2**

*Chair: Pauline Samia (Kenya)*
- Comparison of Efficacy of Low Glycemic Index Therapy and Modified Atkins Diet in children with DRE: A Randomized Non-inferiority Trial - Vaishakh Anand (India)
- Felbamate role in intractable pediatric epilepsy- should we keep on using it as the last resort? - Shira Rabinowicz (Israel)
- The natural history of SCN8A epilepsy and related diseases - Elena Gardella (Denmark)

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Wednesday 1 September

10:30-11:30 CEST  Room C

**Platform Session: Genetics**

**Chair:** Katja Kobow (Germany)

- Everolimus as a precision therapy for drug-resistant epilepsy caused by mutations in the GATOR1 complex genes DEPDC5 and NPLR3 - Patrick B. Moloney (Ireland)
- Genetic Landscape of Infantile Spasms with Focal Brain Malformations - Matthew Coleman (Australia)
- Genotype-phenotype correlations in SCN8A-related disorders reveal prognostic and therapeutic implications - Katrine Marie Johannesen (Denmark)
- Functional assessment of KCNB1 loss- and gain-of-function variants and correlation with electro-clinical phenotypes - Antonella Riva (Italy)

12:00-13:00 CEST  Room A

**Psychiatry & Neuropsychology**

**Platform Session: Neuropsychology**

**Chair:** Mary Lou Smith (Canada)

- Impoverished future thinking in TLE: a novel cognitive deficit in epilepsy and its implications for surgical counselling - Genevieve Rayner (Australia)
- Childhood Trauma Profiles in Epilepsy and Psychogenic Nonepileptic Seizures - Tianren Yang (Australia)
- Randomized Controlled Trial on Neuropsychological Rehabilitation for Patients with Drug Refractory Epilepsy: Challenges, Adaptations & Findings - Shivani Sharma (India)

12:00-13:00 CEST  Room B

**Adult Epileptology**

**Platform Session: Adult epileptology**

**Chair:** Fatema Abdulla (Bahrain)

- Factors influencing the daily evolution of preictal connectivity dynamics in epilepsy - Jakub Kopal (Czech Republic)
- Cardiac autonomic response to hyperventilation and risk of SUDEP - William Szurhaj (France)
- Spectral shifts across distributed networks in cortex predict seizure onset - Maryam Hasanzadeh Mofrad (Canada)
- Juvenile myoclonic epilepsy: Outcome beyond three decades from onset- A hospital based cohort study - Harini Pavuluri (India)

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12:00-13:00 CEST  
Room C

**Drug Therapy Platform Session: Drug therapy**

*Chair: Sanjeev Thomas (India)*

- Machine learning based prediction model for initial antiseizure medication selection in newly diagnosed epilepsy - Haris Hakeem (Australia)
- Comparison of the effects of new anti-seizure drugs (ASDs) on cardiac autonomic control in patients with temporal lobe epilepsy (TLE) - Fedele Dono (Italy)
- Time to Onset of Cannabidiol Treatment Effect and Resolution of Adverse Events in Tuberous Sclerosis Complex Randomised Controlled Trial (GWPCARE6) - Rocio Sanchez-Carpintero (Spain)
- Cerliponase alfa for treatment of CLN2 disease in a patient cohort including children <3 years old: Interim results from an ongoing clinical study - Angela Schulz (Germany)

12:00-13:00 CEST  
Room D

**Other Interactive Session: Changing driving policies**

*Chair: Nathalie Jette (USA)*

- Introduction - Nathalie Jette (USA)
- Risk assessment and how does it influence driving recommendations? - discussion - Ettore Beghi (Italy)
  a. How to assess driving risk in people with epilepsy - Alejandro De Marinis (Chile)
- How to influence driving regulations and legislation - discussion - Amza Ali (Jamaica)
  a. How to influence driving regulations and legislation: the Austrian experience - Christoph Baumgartner (Austria)
  b. How to influence driving regulations and legislation: the Japanese experience - Takuji Nishida (Japan)
- Next steps – discussion - Mary Secco (Canada)
  a. Where do we go next to remove barriers to driving in those with epilepsy who are well controlled, etc.
    - Michael Sperling (USA)
- Conclusions/final discussion - Alejandro De Marinis (Chile)

13:30-14:30 CEST  
Room A

**Other Parallel Session: Opportunities and challenges in the delivery of care**

*Co-Chairs: William Theodore (USA) & Amza Ali (Jamaica)*

- The role of technology in closing the treatment gap - Amza Ali (Jamaica)
- Epilepsy care in China; a clinic of 1.3 billion people - Shichuo Li (China)
- A primary healthcare model, to reduce the epilepsy treatment gap - Palmira Fortunato Dos Santos (Mozambique)
- Interventions to improve access to epilepsy care: is there any evidence of effectiveness? - Archana Patel (USA)

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13:30-14:30 CEST Room B

**Basic Sciences**

**Parallel Session: Epigenetics and epilepsy collide: unravelling mechanisms, treatments and diagnostics**

*Chair: David Henshall (Ireland)*
- (Post)transcriptional profiling in human epilepsy - *Albert Becker* (Germany)
- Chromatin landscape of human temporal lobe epilepsy - *Karen Conboy* (Ireland)
- Small non-coding RNAs as novel therapeutic targets and biomarkers for epilepsy - *Erwin Van Vliet* (Netherlands)

13:30-14:30 CEST Room C

**Other**

**Parallel Session: Genetics, drug discovery and stigma in the ILAE years**

*Co-Chairs: Ingrid Scheffer (Australia) & Peter Wolf (Denmark) & Simon Shorvon (United Kingdom)*
- Genetics and epilepsy over time - *Howard Goodkin* (USA)
- The development of the concepts of drug discovery - *Meir Bialer* (Israel)
- How stigma has changed - the image of epilepsy in literature - *Peter Wolf* (Denmark)

13:30-15:30 CEST Room D

**Other**

**Parallel Session: Workshop: Clinical Practice Guideline (CPG) development and implementation**

*Co-Chairs: Nathalie Jette (USA) & Francesco Brigo (Italy)*
- Welcoming remarks - *Nathalie Jette* (USA)
- Introduction: what is a CPG and what are alternative methods when the evidence is limited?
  - What is and what is not a guideline? - *Katia Lin* (Brazil)
  - When a CPG is not feasible: consensus recommendations including Delphi method (will include real example from an ILAE commission) - *Nathalie Jette* (USA)
- How to develop a CPG
  - From formulating the clinical question to making final recommendations - *Francesco Brigo* (Italy)
  - ILAE neonatal seizures guidelines – a real life example - *Ronit Pressler* (United Kingdom) & *Hans Hartmann* (Germany)
- How to implement a CPG in different settings: the ADAPTE Process and how to implement CPG - *Marco Mula* (United Kingdom)
- Concluding remarks - *Francesco Brigo* (Italy)

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15:00-16:00 CEST  
**Room A**

**Interactive Session: Epilepsy and intellectual disability – best papers**  
*Chair:* Christian Brandt (Germany)  
- Danielle Andrade (Canada)  
- Laura Guilhoto (Brazil)  
- Canan Gurses (Turkey)  
- Kousuke Kanemoto (Japan)  
- Michael Kerr (United Kingdom)  
- Christine Linehan (Ireland)  
- Francis Tan (Netherlands)  
- Vicente Villanueva (Spain)

15:00-16:00 CEST  
**Room B**

**Interactive Session: Connectomics in epilepsy**  
*Co-Chairs:* Paolo Federico (Canada) & Boris Bernhardt (Canada)  
- Connectomics 101 - Sara Larivière (Canada)  
- Network Reorganization And Treatment Outcomes In Focal Epilepsy - Victoria Morgan (USA)  
- Cognition In Epilepsy: Towards A Network Perspective - Lorenzo Caciagli (USA)

15:00-16:00 CEST  
**Room C**

**Interactive Session: The ketogenic diet: highlights for the centennial following its birth**  
*Co-Chairs:* Heung Dong Kim (Korea, Rep. of South) & Jong Rho (USA)  
- Myoclonic astatic epilepsy and the use of the ketogenic diet - Christina Bergqvist (USA)  
- Efficacy of the ketogenic diet in genetic epilepsies - Sehee Kim (Korea, Rep. of South)  
- Role of the gut microbiota in pediatric epilepsy - Jong Rho (USA)  
- Application of the ketogenic diet in the treatment of refractory status epilepticus - Mackenzie Cervenka (USA)

16:30-17:30 CEST  
**Room C**

**Teaching Session: Video session: is this epilepsy or not?**  
- Children - Jo Wilmshurst (South Africa)  
- Adults - Ivan Rektor (Czech Republic)

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16:00-19:00 CEST  Room D

**Basic Sciences**

**Parallel Session: Kindling epileptogenesis: beginnings and future**

*Co-Chairs: Aristea Galanopoulou (USA) & David Henshall (Ireland)*

- Interview with Gyorgy Buzsaki - Gyorgy Buzsaki (USA)
- Interview with Jerome (Pete) Engel Jr - Jerome Engel (USA)
- Interictal epileptiform discharges shape large scale intercortical communications - Jennifer Gelinas (USA)
- Rhythmopathies, microcircuits and epilepsy - Liset Menendez De La Prida (Spain)
- Interview with Claude Wasterlain - Claude Wasterlain (USA)
- Interview with Solomon (Nico) Moshé - Solomon Moshé (USA)
- Interview with Astrid Nehlig - Astrid Nehlig (France)
- HippoBellum. Cerebellum and epilepsy - Esther Krook Magnuson (USA)
- Cortical-subcortical networks in the control of seizures - Patrick Forcelli (USA)
- Interview with Giuliano Avanzini - Giuliano Avanzini (Italy)
- Interview with Annamaria Vezzani - Annamaria Vezzani (Italy)
- Epilepsy crossroads: beyond neurons and epilepsy networks - Melissa Barker-Haliski (USA)
- Genetic epilepsies and precision medicine - Stephanie Schorge (United Kingdom)
- Interview with Graeme Jackson - Graeme Jackson (Australia)
- The ENIGMA-Epilepsy: mapping disease from large data sets - Sanjay Sisodiya (United Kingdom)

16:30-20:30 CEST  Room A

**Status Epilepticus**

**Half-Day Teaching Course: Status epilepticus**

*Chair: Eugen Trinka (Austria)*

- Epidemiology and classification - Eugen Trinka (Austria)
- Pathophysiology and consequences of status epilepticus - Karen Wilcox (USA)
- Diagnosis and treatment: part one - Matthew Walker (United Kingdom)
- Diagnosis and treatment: part two - Nicolas Gaspard (Belgium)

16:30-20:30 CEST  Room B

**Clinical Neurophysiology**

**Half-Day Teaching Course: EEG in diagnosing patients with epilepsy (EEG starter)**

*Co-Chairs: Sándor Beniczky (Denmark) & Donald Schomer (USA)*

- Basic technology, electrodes, montages and localisation - Donald Schomer (USA)
- Systematic approach to EEG interpretation: background activity - William Tatum (USA)
- Normal variants. Sensitivity and specificity - Selim Benbadis (USA)
- Systematic approach to EEG interpretation: interictal and ictal patterns - Sándor Beniczky (Denmark)

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Wednesday 1 September

**Epilepsy Surgery**

Room E

**Planning for success in epilepsy surgery**

*Chair: Lara Jehi (USA)*

10:30-10:45 CEST

**Planning for success in epilepsy surgery - Introduction**

- Introduction: Relevance of planning and measuring success in epilepsy surgery - *Lara Jehi (USA)*

10:45-12:00 CEST

**Planning for success in epilepsy surgery - Session 1: Advances in imaging**

- Imaging epileptic networks - *Fabrice Bartolomei (France)*
- Structural MRI: from eyeballing to fingerprinting - *Fernando Cendes (Brazil)*
- Imaging integration in the OR - *Karl Rössler (Austria)*

12:00-13:30 CEST

**Planning for success in epilepsy surgery - Session 2: Advances in surgical techniques**

- LITT - *Robert Gross (USA)*
- Focused ultrasound - *Ellen Bubrick (USA)*
- Subdural electrodes, stereo EEG, both, or neither? - *Kees Braun (Netherlands)*

14:30-16:00 CEST

**Planning for success in epilepsy surgery - Balancing seizure freedom with “everything else”**

- Stating the problem - *Dario Englot (USA)*
- Innovating in outcome measurement - *Samuel Wiebe (Canada)*
- Neuropsychological outcomes with minimally ablative and resective surgery - *Sallie Baxendale (United Kingdom)*
- Seizure freedom, extent, and timing of resection - *J Helen Cross (United Kingdom)*

16:00-17:15 CEST

**Planning for success in epilepsy surgery - Session 4: Controversial topics and future direction**

- Interneuron transplantations for epilepsy: basic science and potential for human trials - *Derek Southwell (USA)*
- The latest in brain stimulation for epilepsy - *Kristl Vonck (Belgium)*
- Is all this technology worth it? - *Robert Fisher (USA)*

17:15-17:30 CEST

**Planning for success in epilepsy surgery - Closing**

- Closing remarks - *Lara Jehi (USA)*

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Wednesday 1 September

**Social Issues/Nursing**

**IBE Day**

13:00-15:00 CEST

**IBE Day: Making epilepsy a national health priority - intersectoral collaboration**

*Co-Chairs: Action Amos (Malawi) & Mary Secco (Canada)*

- 10-year intersectoral global action plan on epilepsy and other neurological disorders (IGAP) - Tarun Dua, WHO Brain Health Unit (Switzerland)
- Improving care for children with neurological disorders in resource poor settings - Jo Wilmshurst, President International Childhood Neurology Association (South Africa)
- Improving access to essential medicines - Gaby Ooms, Health Action International (Netherlands)
- Putting epilepsy on social policy and development agendas - John O'Toole, Division for Inclusive Social Development, UN Department of Economic and Social Affairs (USA)
- Leveraging the IGAP to improve care for people with epilepsy - Alla Guekht, Chair ILAE Global Advocacy Council (Russian Federation)
- Working with donors - Gardiner Lapham, Trustee BAND Foundation (USA)
- Epilepsy Advocate’s toolkit - Karen Robinson, Epilepsy South Africa (South Africa)
- Global Health in Epilepsy Database - Karen Parko, ILAE North America (USA)

15:00-17:00 CEST

**IBE Day: Empowering youth to raise their voices**

*Co-Chairs: Lorraine Lally (Ireland) & Scarlett Paige (Australia)*

- Epilepsy & Pregnancy: launching IBE’s new toolkit - Lorraine Lally (Ireland) & Gus Baker (United Kingdom)
- Meet the International Golden Light Award Winners 2021: Presentation of 19 awardees
- Hear my Story: International Golden Lights, from IBE’s seven regions, share their personal stories:
  - Africa: tbc
  - Eastern Mediterranean: Mohsen Fariborzi (Iran)
  - Europe: Lynna Held (Germany)
  - Latin America: Luiza Gatta (Brazil)
  - North America: Cassidy Megan (Canada)
  - South East Asia: Vinay Jani (India)
  - Western Pacific: Meng-Leo Chou (Taiwan, Rep of China)
- Introduction to the IBE Global Youth Team - Lorraine Lally (Ireland) & Scarlett Paige (Australia)

17:00-19:00 CEST

**IBE Day: Psychologic treatment and self-management of epilepsy**

*Chair: Gus Baker (United Kingdom)*

- The comorbidities of epilepsy: a review - Gus Baker (United Kingdom)
- The psychological management of epilepsy: the Turkish experience - Nuran Aydemir (Turkey)
- Self-management programmes in children: the Scottish experience - Liam Dorris (United Kingdom)
- Psychological treatment of epilepsy: the Mauritius experience - Devishada Dassyne (Mauritius)
- Self-management programmes: the US experience - Rosemarie Kobau (USA)

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Satellite Symposia

Saturday 28 August

16:30-17:30 CEST

Satellite Symposium LivaNova: Beyond Seizures: A systematic approach towards identifying and managing epilepsy’s most burdensome comorbidities

Chair: Maxine Dibué (Germany)

- Cardiac complications in epilepsy: when to expect, what to do? - Rainer Surges (Germany)
- Sleep and epilepsy: interactions and implications - Berthold Voges (Germany)
- Why do we need to assess cognition in patients with epilepsy? - Jukka Peltola (Finland)
- Managing comorbid depression in epilepsy - Tim von Oertzen (Austria)

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Satellite Symposia

Sunday 29 August

17:00-18:00 CEST Room A
Satellite Symposium GW Pharmaceuticals: Management of multiple seizure types in rare and severe early-onset epilepsies
Chair: Lieven Lagae (Belgium)
- Challenges and barriers in the management of patients with multiple seizure types - Ailsa McLellan (United Kingdom)
- Current options in the treatment of rare epilepsies - Lieven Lagae (Belgium)
- Broad spectrum antiseizure effects of GW cannabidiol in LGS, DS and TSC - Hari Bhathal (Spain)
- Q&A

20:00-21:00 CEST Room A
Satellite Symposium Miller Medical Communications, LLC. (Zogenix): A New Look at the Natural Course of Dravet Syndrome: Can We Influence It?
Chair: Andreas Brunklaus (United Kingdom)
- The Importance of Understanding the Natural Course of Dravet Syndrome - Andreas Brunklaus (United Kingdom)
- Dravet Syndrome Stage 1 - Andreas Brunklaus (United Kingdom)
- Dravet Syndrome Stage 2 - Joseph Sullivan (USA)
- Dravet Syndrome Stage 3 - Adam Strzelczyk (Germany)
- Q&A

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Satellite Symposia

Monday 30 August

09:00-10:00 CEST  Room D

**Satellite Symposium UCB: The future of the epilepsies: innovation, transformation and evolution**

*Chair: Marte Syvertsen (Norway)*

- Helpilepsy – Utilising remote monitoring of epilepsy to improve patient outcomes via actionable insights - *Ludovic Ampe (Belgium)*
- Healios – Considering an emotional wellbeing and mental health app as part of the epilepsy treatment pathway - *Richard Andrews (United Kingdom)*
- Neuro Event Labs – Using computer vision and machine learning to support diagnosis and monitoring of epilepsy patients - *Kaapo Annala (Finland)*
- How is UCB utilising experience and expertise to develop new differentiated medicines, with the aim of improving the lives of patients living with epilepsy? - *Stefanie Dedeurwaerdere (Belgium)*

12:00-13:00 CEST  Room D

**Satellite Symposium (repeat) GW Pharmaceuticals: Management of multiple seizure types in rare and severe early-onset epilepsies**

*Chair: Lieven Lagae (Belgium)*

- Challenges and barriers in the management of patients with multiple seizure types - *Ailsa McLellan (United Kingdom)*
- Current options in the treatment of rare epilepsies - *Lieven Lagae (Belgium)*
- Broad spectrum antiseizure effects of GW cannabidiol in LGS, DS and TSC - *Hari Bhathal (Spain)*
- Q&A

17:00-18:00 CEST  Room A

**Satellite Symposium UCB: Bridging the gap: what do patients want from the management of their epilepsy?**

*Chair: Christian Brandt (Germany)*

- Introduction and discussion of the latest patient preference data - *Christian Brandt (Germany)*
- Case study - *Christian Brandt (Germany)*
- Efficacy vs tolerability: do you need to compromise? - *Philippe Ryvlin (Switzerland)*
- Efficacy vs tolerability: do you need to compromise? - *Vasilios Kimiskidis (Greece)*

20:00-21:00 CEST  Room A

**Satellite Symposium BioMarin: Looking beyond the seizure: Why early diagnosis for paediatric epilepsy matters**

*Chair: Nicola Specchio (Italy)*

- Differential diagnosis of early-onset paediatric epilepsies - *Nicola Specchio (Italy)*
- Why reducing diagnostic delay matters in practice - *Ingrid Scheffer (Australia)*
- Interactive Live Discussion

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Satellite Symposia

Tuesday 31 August

09:00-10:00 CEST Room E

Satellite Symposium Eisai: Harnessing real-world data to improve outcomes in people with epilepsy
Chair: Emilio Perucca (Italy)
- Real-world studies in epilepsy: benefits and limitations - Nuno Canas (Portugal)
- Evidence from clinical practice studies – the best insight into antiseizure medications? - Vicente Villanueva (Spain)

11:30-12:30 CEST Room F

Satellite Symposium (repeat) UCB: Bridging the gap: what do patients want from the management of their epilepsy?
Chair: Christian Brandt (Germany)
- Introduction and discussion of the latest patient preference data - Christian Brandt (Germany)
- Case study - Christian Brandt (Germany)
- Efficacy vs tolerability: do you need to compromise? - Philippe Ryvlin (Switzerland)
- Efficacy vs tolerability: do you need to compromise? - Vasilios Kimiskidis (Greece)

17:00-18:00 CEST Room B

Chair: Emilio Perucca (Italy)
- A life without limits: why we should strive for seizure freedom for our patients - Jacqueline French (USA)
- Current challenges and unmet needs in adults with drug-resistant focal onset seizures - Ley Sander (United Kingdom)
- Redefining patient outcomes in drug-resistant focal onset seizures: clinical experience with novel therapies - Bernhard Steinhoff (Germany)

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Satellite Symposia

Wednesday 1 September

09:00-10:00 CEST

**Satellite Symposium PTC Therapeutics: A practical approach – epilepsy misdiagnosis in clinical practice**

*Chair: Agathe Roubertie (France)*
- Unmasking differential diagnosis of epilepsy – a focus on AADC deficiency - *Agathe Roubertie (France)*
- AADC deficiency diagnosis: How to recognise the red flags in clinical practice – a case study - *Regina Trollmann (Germany)*
- The key role of carers in AADC deficiency: The importance of early diagnosis - *Richard Poulin (Singapore)*

11:00-12:00 CEST

**Satellite Symposium (repeat) BioMarin: Looking beyond the seizure: Why early diagnosis for paediatric epilepsy matters**

*Chair: Nicola Specchio (Italy)*
- Differential diagnosis of early-onset paediatric epilepsies - *Nicola Specchio (Italy)*
- Why reducing diagnostic delay matters in practice - *Ingrid Scheffer (Australia)*
- Interactive Live Discussion

13:00-14:00 CEST


*Chair: Emilio Perucca (Italy)*
- A life without limits: why we should strive for seizure freedom for our patients - *Jacqueline French (USA)*
- Current challenges and unmet needs in adults with drug-resistant focal onset seizures - *Ley Sander (United Kingdom)*
- Redefining patient outcomes in drug-resistant focal onset seizures: clinical experience with novel therapies - *Bernhard Steinhoff (Germany)*
Industry Stage Sessions

Sunday 29 August

14:30-14:50 CEST  Industry Area

Industry Stage Session GW Pharmaceuticals: Best practice in management of patients on cannabidiol: Expert clinical cases
- Angela Kaindl (Germany)
- Elizabeth Thiele (USA)

Monday 30 August

12:00-12:20 CEST  Industry Area

Industry Stage Session Arvelle Therapeutics – An Angelini Pharma Company: Clinical experience with cenobamate
- Gregory Krauss (USA)

Industry Webinars

Webinar Biocodex  Exhibition Area

Webinar Natus  Exhibition Area

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