

# The 25<sup>th</sup> Annual Meeting of Infantile Seizure Society

## PROGRAM - ORAL PRESENTATIONS

**DAY 1, THURSDAY, JUNE 4**

**Neurophysiology/Neuroimaging Structural and functional imaging in DEE/EEG biomarkers for diagnosis and prognosis in DEE/Reversible DEEs**

**Chairperson: Yuichi Abe (National Center for Child Health and Development, Japan)**

**Noboru Yoshida (Asamura Children's Clinic, Japan)**

**Takayuki Mitsuhashi (Clinical Research Center, International University of Health and Welfare, Japan)**

9:30-11:30

**S1-1**

**Treatment of Infantile epileptic spasms syndrome in Japan**

**Ryuki Matsuura**

Division of Pediatric Epilepsy Center/Neurology, Saitama Children's Medical Center, Saitama, Japan

The Jikei University School of Medicine, Department of Pediatrics, Tokyo, Japan

**S1-2**

**Management of Developmental and Epileptic Encephalopathy Due to Structural Etiologies: A Pediatrician's Perspective**

**Takashi Saito**

Department of Child Neurology, National Center of Neurology and Psychiatry, Kodaira, Japan

**S1-3**

**EEG-Based Biomarkers for Predicting Seizure Recurrence After Antiseizure Medication Withdrawal**

**Lung-Chang Lin**

Department of Pediatrics, Kaohsiung Medical University

**S1-4**

**EEG Biomarkers Reflecting Epileptic Networks in Epileptic Encephalopathy / Developmental and Epileptic Encephalopathies**

**Tohru Okanishi**

Division of Child Neurology, Tottori University, Yonago, Japan

**S1-5**

**Reversible Developmental and Epileptic Encephalopathies (DEEs)**

**Ahmad Rithauddin Bin Mohamed**

Hospital Tunku Azizah, Kuala Lumpur, Malaysia

## **Surgical Treatment for DEE**

**Chairperson: Ryoko Honda (NHO Nagasaki Medical Center, Japan)**

**Haruhiko Kishima (The University of Osaka, Graduate School of Medicine, Japan)**

14:00-15:00

### **S2-1**

#### **Emerging Surgical Therapies for DEE: Targeting the Thalamocortical Network**

**Hiroki Nariai**

University of California, Los Angeles, Los Angeles, United States

### **S2-2**

#### **Decision-Making in Infant and Pediatric Epilepsy Surgery in Japan: The Role of Pediatric Epileptologists**

**Ryoko Honda**

Chief Physician, Omura, Japan

### **S2-3**

#### **Role of Epilepsy Surgery in DEEs**

**Raman Sankar**

David Geffen School of Medicine, UCLA, Los Angeles, United States

## **Epidemiology/Clinical Evaluation Deep phenotyping in DEE: beyond seizure semiology**

**Chairperson: Keiko Yanagihara (Osaka Women's and Children's Hospital, Japan)**

**Satoru Sakuma (Osaka Metropolitan University Graduate School of Medicine, Japan)**

**Shin Nabatame (National Hospital Organization, National Osaka Hospital, Japan)**

15:30-17:30

### **S3-1**

#### **Global epidemiology of Infantile-onset epilepsies/DEE**

**Jitendra Kumar Sahu**

Postgraduate Institute of Medical Education and Research, Chandigarh, India

### **S3-2**

#### **Deep phenotyping in DEE with structural etiology: early surgical decision-making based on developmental trajectory**

**Takato Akiba**

Epilepsy Center, Juntendo University Hospital, Tokyo, Japan

Juntendo University School of Medicine, Department of Pediatrics, Tokyo, Japan

### **S3-3**

#### **Our Experience with Developmental and Epileptic Encephalopathy (DEE)**

**Seok-Jin Lee**

Yonsei University College of Medicine, Severance Children's Hospital, Seoul, South Korea

**S3-4**  
**Neuroimaging of infantile epileptic spasms syndrome**

**Jun Natsume**

Department of Developmental Disability Medicine, Nagoya University Graduate School of Medicine, Nagoya, Japan

**S3-5**  
**Deep phenotyping in DEE: beyond seizure semiology**

**Nicola Specchio**

Bambino Gesù Children's Hospital, Institute for Research and Health Care (IRCCS), Rome, Italy

**DAY 2, FRIDAY, JUNE 5**

**Genetics/Pathophysiology (Basic Science)**

**Chairperson: Ahmad Rithauddin Mohamed (Hospital Tunku Azizah Kuala Lumpur, Malaysia)**

**Norimichi Higurashi (Musashi-Kosugi Pediatrics & Epilepsy Clinic, Japan)**

9:00-10:30

**S4-1**  
**Nationwide survey of specific genetic epilepsies**

**Hirokazu Kurahashi**

Department of Pediatrics, Aichi Medical University, Nagakute, Japan

**S4-2**  
**Precision Medicine approach in Paediatric Epilepsy care**

**Choong Yi Fong**

Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia

**S4-3**  
**Regional Imbalance of Tonic Inhibition Underlies Epileptic Features in a Mouse Model of Angelman Syndrome**

**Kiyoshi Egawa**

Hokkaido University Hospital, Sapporo, Japan

**S4-4**  
**Convergence and divergence of genetic backgrounds in childhood-onset epilepsy**

**Yasunari Sakai**

Kyushu University, Fukuoka, Japan

**Metabolic/Others Treatable metabolic etiologies in DEE**

**Chairperson: Takeshi Yoshida (Kyoto University Graduate School of Medicine, Japan)**

**Takashi Saito (National Center of Neurology and Psychiatry, Japan)**

**Wang-Tso Lee (National Taiwan University Children's Hospital, Taiwan)**

11:00-12:30

**S5-1**

**Genotype-Phenotype Dynamics and the Criticality of Early Intervention in Treatable Inherited Metabolic Disorders associated with Developmental Epileptic Encephalopathies.**

**Asuri Narayan Prasad**

Western University and Schulich School of Medicine & Dentistry, London, Canada

**S5-2**

**Current Status and Challenges in the Diagnosis and Management of Vitamin B6-Dependent Epilepsy in Japan**

**Tomoyuki Akiyama**

Department of Pediatric Neurology, Okayama Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama, Japan

**S5-3**

**Recognizing Treatable Metabolic Etiologies of Developmental and Epileptic Encephalopathy in the Genomic Era**

**Takeshi Yoshida**

Department of Epilepsy, Movement Disorders and Physiology, Kyoto University Graduate School of Medicine, Kyoto, Japan

**Treatment (Medicine, Non surgical DBS, VNS, RNS...)**

**Chairperson: Hideaki Shiraishi (Dokkyo Medical University, Japan)**

**Kenjiro Kikuchi (Saitama Children's Medical Center, Japan)**

**Ichiro Kuki (Osaka City General Hospital, Japan)**

14:00-16:00

**S6-1**

**Choosing first-line therapy for infantile spasms: combining evidence and wisdom**

**Jitendra Kumar Sahu**

Postgraduate Institute of Medical Education and Research, Chandigarh, India

**S6-2**

**Neurostimulation Therapies for Epilepsy Approved in Japan**

**Noriko Sumitomo**

National Center of Neurology and Psychiatry, Kodaira-city, Japan

**S6-3**

**Application of Transcutaneous Auricular Vagus Nerve Stimulation for Drug-Resistant Epilepsy Cases**

**Hideaki Shiraishi**

Department of Pediatrics, Dokkyo Medical University, Shimotsuga District, Japan

**S6-4**  
**Treatment Approaches: Antisense Oligonucleotides (ASOs) and Responsive Neurostimulation (RNS)**

**Seok-Jin Lee**

Yonsei University College of Medicine, Severance Children's Hospital, Seoul, South Korea

**S6-5**  
**Emerging Medical Therapies for DEEs**

**Raman Sankar**

David Geffen School of Medicine, UCLA, Los Angeles, United States

**DAY 3, SATURDAY, JUNE 6**

**ISS and JSCN collaborative symposium Developmental & Cognitive Assessment**  
**Chairperson: Hideo Yamanouchi (Saitama Medical University, Japan)**  
**Hitoshi Osaka (Jichi Medical University, Japan)**

10:00-11:30

**S7-1**  
**Why 'self – limited' does not always mean 'benign': development in childhood epilepsies**

**Naomi Hino-Fukuyo**

Faculty of Medicine, Faculty of Medicine, Tohoku Medical and Pharmaceutical University, Sendai, Japan

**S7-2**  
**Developmental and Cognitive Reassessment During Transition to Adult Care in Childhood-Onset Epilepsy**

**Tetsuhiro Fukuyama**

Department of Pediatrics, Shinshu University School of Medicine, Matsumoto, Japan

**S7-3**  
**Developmental and Cognitive Assessment Across Developmental and Epileptic Encephalopathies: Clinical Trajectories and Electroclinical Correlates**

**Satoru Ikemoto**

Jikei University School of Medicine, Tokyo, Japan

**S7-4**  
**Modification of the cognitive and developmental outcome by targeted therapies - Myth or reality ?**

**Vinayan Kollencheri Puthenveetil**

Department of Pediatric Neurology, Amrita Brain Center for Children & Advanced Center for Epilepsy, Amrita Institute of Medical Sciences, Cochin, Kerala, India

# PROGRAM - POSTER SESSION

## Session A

**Moderators:** **Asuri Narayan Prasad** Western University and Schulich School of Medicine, Canada  
**Gaku Yamanaka** Tokyo Medical University, Japan  
**Yuji Ito** Nagoya University Graduate School of Medicine, Japan

### ISS-1

**Development of AAV vector-mediated gene therapy for SSADH deficiency.**

**Kiri Koshu** Jichi medical university, Shimotsuke, Japan

### ISS-2

**Myoclonic epilepsy associated with a heterozygous pathogenic missense variant in the SATB1 gene: a case report and review of literature**

**Asami Watanabe** Department of Pediatrics, Nagasaki University Hospital, Nagasaki, Japan

### ISS-3

**Dihydropyrimidinase deficiency as a potential modifier of extensive focal cortical dysplasia associated with low-level MTOR mosaicism**

**Tzu-Hsuan Su** Department of Pediatrics, National Taiwan University Hospital, Taipei, Taiwan

### ISS-4

**Withdrawn**

### ISS-5

**Two children with CLTC-related neurodevelopmental disorders: Clinical and neuroimaging phenotypes.**

**Jing Zhou** Department of Pediatrics, Aichi Medical University, Nagakute, Japan

### ISS-6

**Quantitative analysis of microstructural alteration and white matter abnormality in Dravet syndrome using 3DT1WI and diffusion MRI**

**Yuji Ito** Department of Pediatrics, Nagoya University Graduate School of Medicine, Nagoya, Japan

### ISS-7

**Neurodevelopmental outcomes after hemispherotomy in infants with hemimegalencephaly and cerebellar malformations**

**Takayuki Handa** Department of Child Neurology National Center Hospital, National Center of Neurology and Psychiatry (NCNP), Tokyo, Japan

### ISS-8

**Longitudinal changes and correlation in clinical and neuroimaging in a patient with beta-propeller protein-associated neurodegeneration**

**Shin Nabatame** Department of Paediatrics, National Organization Hospital, National Osaka Hospital, Osaka, Japan  
Graduate School of Medicine, the University of Osaka, Department of Paediatrics, Suita, Japan  
The University of Osaka Hospital, Epilepsy Centre, Suita, Japan

## Session B

**Moderators:** Lung-Chang Lin Kaohsiung Medical University, Taiwan  
Shingo Oana Tokyo Medical University, Japan  
Susumu Ito Tokyo Women's Medical University, Japan

### ISS-9

#### **Characteristics of high amplitude fast activity on EEG in children with beta-propeller protein-associated neurodegeneration**

Ryosuke Suzui Nagoya University Graduate School of Medicine, Nagoya, Japan

### ISS-10

#### **Electroencephalographic evolution before and after epilepsy onset in IQSEC2-related developmental and epileptic encephalopathy**

Itaru Hayakawa National Center for Child Health and Development, Tokyo, Japan

### ISS-11

#### **Seizure and Developmental Outcomes Following Early Hemispherotomy for Early-Onset Epilepsy with Hemimegalencephaly**

Yoko Kobayashi Takahashi Department of Child Neurology, National Center of Neurology and Psychiatry, Tokyo, Japan

### ISS-12

**Withdrawn**

### ISS-13

#### **A case of frequent epileptic apnea with severe desaturation in Infantile Epileptic Spasms Syndrome.**

Shingo Oana Pediatrics and Adolescent Medicine, Tokyo Medical University, Tokyo, Japan

### ISS-14

#### **Treatment Responses in STXBP1-Related Developmental and Epileptic Encephalopathy**

Yurika Numata-Uematsu Department of Pediatrics, Tohoku University School of Medicine, Sendai, Japan

### ISS-15

#### **Comparison of Clinical Characteristics and Surgical Outcomes between Hemimegalencephaly and Localized Megalencephaly**

Keiya Iijima Department of Neurosurgery, National Center Hospital, National Center of Neurology and Psychiatry, Kodaira, Japan

### ISS-16

#### **A Study on the Development of 2 Versions of the Ultra-Short QOLCE-J Scale for Pediatric Epilepsy**

Eri Moriguchi Department of Nursing, Kyoto Koka University, Kyoto, Japan

## Session C

**Moderators:** **Masakazu Mimaki** Teikyo University School of Medicine, Japan  
**Hiroyuki Kidokoro** Nagoya University Hospital, Japan  
**Azusa Maruyama** Hyogo Prefectural Kobe Children's Hospital, Japan

### ISS-17

#### **Comparison of clinical findings between epileptic and non-epileptic groups in infants and young children presenting with suspected epilepsy**

**Nodoka Hinokuma** Department of Pediatrics, Showa Medical University, Shinagawa-ku, Tokyo, Japan  
Tokyo Metropolitan Ebara Hospital, Department of Pediatrics, Ota-ku, Tokyo, Japan

### ISS-18

**Withdrawn**

### ISS-19

#### **Etiology, treatment and outcomes of cases developing late-onset epileptic spasms**

**Momoka Natsume** Department of Pediatrics, Okazaki City Hospital, Okazaki, Japan

### ISS-20

#### **Clinical Characteristics of Infantile Epileptic Spasms Syndrome at Our Institution**

**Yukiko Sanada** Department of Pediatric, Otsu Red Hospital, Shiga, Japan

### ISS-21

#### **Distinctive Stereotypic and Choreiform Movements in Infant with *SCN2A*-Related Developmental and Epileptic Encephalopathy**

**Kaori Konno** Department of Neuropediatrics, Tokyo Metropolitan Neurological Hospital, Tokyo, Fuchu, Japan

### ISS-22

#### **Dynamic Remission and Relapse Trajectories in Infantile-Onset Epilepsy: A 10-Year Longitudinal Study**

**OHCHEOL KWON** Asan Medical Center Children's Hospital, Seoul, South Korea

### ISS-23

#### **Neonatal Seizures Associated with a Novel *YWHAG* Variant: A Case Report**

**Chung-Min Tsai** Department of Pediatrics, National Cheng Kung University Hospital, College of Medicine, National Cheng Kung University, Tainan, Taiwan

### ISS-24

#### ***SCN2A*- related encephalopathy: two cases report in one family**

**Ping Liu** Department of Pediatrics, National Cheng Kung University Hospital, College of Medicine, National Cheng Kung University, Tainan 70101, Taiwan

### ISS-25

#### **A Case of Developmental and Epileptic Encephalopathy Caused by a Truncating *SCN2A* Mutation**

**Hiroshi Matsumoto** Department of Pediatrics, Saitama Medical University, Irumagun, Moroyama, Japan