Day 3: Nov. 9 (Sat.) Venue 2 (6F 602ABCD)

8:10~9:00 Morning Seminar 4

Sponsored by Ultragenyx Japan K.K.

Chairperson: Kei Murayama

(Diagnostics and Therapeutics of Intractable Diseases, Juntendo University Faculty of Medicine)

MS4 Protecting Parents and Children with Familial Hypercholesterolemia

Keiji Matsunaga

Anti-aging and Vascular Medicine, Kagawa University Hospital

9:20~10:10 Sponsored Seminar 6

Sponsored by Ultragenyx Japan K.K.

Chairperson: Kimihiko Oishi

(Department of Pediatrics, The Jikei University School of Medicine)

SPSE6 Current Status and Challenges in the Diagnosis, Treatment, and Long-term management of Long-chain fatty acid oxidation disorders

O Hironori Kobayashi

Laboratories Division, Shimane University Hospital

10:30~11:20 Oral 10: Patient registry/Mitochondrial disorders 1

Chairpersons: Ayako Matsunaga

(Department of Pediatrics, St. Marianna University School of Medicine)

Chikahiko Numakura

(Department of Clinical Genomics & Pediatrics, Saitama Medical University)

O-47 Report on the activities of JaSMIn

Satoko Tsushima^{1,2,3}, Masumi Omori², Taiko Fujioka², Masahisa Kobayashi^{2,4}, Motomichi Kosuga^{2,3}
¹Nursing Department, Specialist Nursing Office, Genetic Coordinator, National Center for Child Health and Development

²Committee for Patient Registration, Japanese Society for Inherited Metabolic Diseases

³Division of Medical Genetics, National Center for Child Health and Development

⁴Department of Pediatrics, The Jikei University School of Medicine

O-48 A case of Leigh syndrome and SLC25A19 abnormality identified through Mitochondrial disease panel

○ Takanori Onuki¹, Hiromi Nyuzuki¹, Kentaro Sawano¹, Nao Shibata¹, Yohei Ogawa¹, Hitomi Fujii² Shigeru Maruyama³, Akira Ohtake⁵, Yasushi Okazaki⁴, Kei Murayama⁴

¹Department of Pediatrics, Niigata University Graduate School of Medical and Dental Sciences

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⁴Diagnostics and Therapeutics of Intractable Diseases, Intractable Disease Research Center, Juntendo University, Graduate School of Medicine

⁵Department of Pediatrics & Clinical Genomics, Faculty of Medicine, Saitama Medical University

O-49 Skeletal alterations resembling mucopolysaccharidosis associated with novel variants in *MARS2* gene

O Hiroyuki Iijima^{1,2}, Yuko Tsujioka³, Yoshiyuki Tsutsumi⁴, Akira Ohtake²

¹Department of General Pediatrics & interdisciplinary Medicine, National Center for Child Health and Development

²Department of Clinical Genomics & Pediatrics, Saitama Medical University

³Department of Radiology, Keio University School of Medicine

⁴Department of Radiology, National Center for Child Health and Development

O-50 Functional analysis of mitochondrial disease gene *PNPLA4* and search target lipid using zebrafish

O Hiromi Nyuzuki^{1,2}, Ryuichi Hishida², Hideaki Matsui²

¹Department of Pediatrics, Center for Medical Genetics, Niigata University Medical and Dental Hospital

²Department of Neuroscience of Disease, Brain Research Institute, Niigata University

O-51 Novel mitochondrial disorder developed by epigenetics silencing: MORC2-related disorders

○ Masaru Shimura¹, Tomohiro Ebihara², Makiko Tajika¹, Yohei Sugiyama³, Takuya Fushimi¹ Keiko Ichimoto¹, Akira Ohtake⁴, Yasushi Okazaki⁵, Kei Murayama¹,³,⁵

¹Department of Metabolism, Chiba Children's Hospital

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 $^5\mbox{Diagnostics}$ and Therapeutics of Intractable Diseases, Intractable Disease Research Center,

Juntendo University, Graduate School of Medicine

11:20~12:00 Oral 11: Mitochondrial disorders 2

Chairpersons: Hiromi Nyuzuki

(Nigata University Medical & Dental Hospital)

Chunhua Zhang

(Department of research & development of MILS International)

O-52 ATP7A gene variants cause symptoms of mitochondrial disease including Leigh syndrome in two cases.

○ Yohei Sugiyama^{1,2}, Yukiko Yatsuka², Kouta Nakamura², Yoshihito Kishita^{2,3}, Takuya Fushimi⁴ Masaru Shimura⁴, Taira Toki⁵, Akira Ohtake⁶, Yasushi Okazaki^{2,7}, Kei Murayama^{1,2}

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⁵Department of Pediatrics, Faculty of medicine, Kitasato University

⁶Department of Pediatrics & Clinical Genomics, Faculty of Medicine, Saitama Medical University

⁷Laboratory for Comprehensive Genomic Analysis, RIKEN Center for Integrative Medical Sciences

O-53 A study of 23 children with refractory epilepsy and mitochondrial tRNA synthase deficiency in China

O Danmin Shen¹, Fang Fang¹, Xiaodi Han¹, Xin Duan¹, Chaolong Xu¹, Zhimei Liu¹, Yang Liu¹ Weixing Feng¹, Jie Deng²

¹Department of Neurology, Beijing Children's Hospital, Capital Medical University, Beijing, China ²Department of Neurology, National Center for Children's Health, Beijing Children's Hospital, Capital Medical University, Beijing, China

O-54 Enhancing Molecular Diagnosis yield through transcriptomic disruption discovery for Mitochondrial Disorders in China

○ Xin Duan¹, Zhimei Liu¹, Jia Wang², Chaolong Xu¹, Ying Zou¹, Junling Wang³, Tianyu Song¹ Xiaodi Han¹, Manting Xu¹, Fang Fang¹

¹Department of Neurology, Beijing Children's Hospital, Capital Medical University, National Center for Children's Health, Beijing 100045, China

²Cipher Gene Ltd, Beijing 100871, China

³Department of Pediatrics, Third Affiliated Hospital of Zhengzhou University, Zhengzhou, Henan 450052, China

O-55 Clincal, Metabolic, and Genetic Analysis and Follow-Up of 42 Patients With Short-chain enoyl-CoA hydratase deficiency in China

 Yang Liu, Fang Fang, Xin Duan, Tianyu Song, Danmin Shen, Ruoyu Duan, Minhan Song Chaolong Xu

Beijing Children's Hospital, Children's National Medical Center

$12:20\sim13:10$ Lancheon Seminar 6

Sponsored by OrphanPacific, Inc.

Chairperson: Shirou Matsumoto

(Department of Neonatology, Kumamoto University Hospital)

LS6 The Present and Future of Urea Cycle Disorders

O Yoichi Wada

Department of Pediatrics, Tohoku University Graduate School of Medicine

$13:20\sim14:10$ Sponsored Seminar 7

Sponsored by Clinigen K.K.

Chairperson: Satoshi Okada

(Graduate School of Biomedical and Health Sciences, Hiroshima University)

SPSE7-1 Current status of hematopoietic stem cell transplantation for inborn errors of metabolism

O Hiromasa Yabe

Department of Pediatrics, Tokai University School of Medicine

SPSE7-2 A Case of Mucopolysaccharidosis-Type-II who Underwent Allogeneic Bone Marrow Transplantation Combined with Intraventricular Enzyme Replacement Therapy

O Asahito Hama

Department of Hematology and Oncology, Children's Medical Center, Japanese Red Cross Aichi Medical Center Nagoya First Hospital