

SS 1 October 30 14:50~16:20

<A genomic view of mitochondrial diseases>

Chairperson: Yasushi Okazaki (Saitama Medical University, Japan)

SS 1-1 Mitochondrial DNA mutations associated with deafness

Min-Xin Guan (Zhejiang University, China)

SS 1-2 Clinical Utility of Exome Sequencing in children with mitochondrial disease

David Thorburn (Murdoch Childrens Research Institute & University of Melbourne, Australia)

SS 1-3 Comprehensive genomic analyses of mitochondrial respiratory chain disorders and development of in-house diagnostic panel

Yasushi Okazaki (Saitama Medical University, Japan)

Sponsor: SBI Pharmaceuticals Co., Ltd.

SS 2 October 30 17:00~18:30

<Mitochondrial and infectious disease>

Chairperson: Kiyoshi Kita (Nagasaki University, Japan)

SS 2-1 Mutant malaria parasites resistant to antimalarial Atovaquone cannot spread

Josephine Elizabeth Siregar (Eijkman Institute for Molecular Biology, Indonesia)

SS 2-2 Mitochondrial-mediated antiviral innate immunity and oxidative phosphorylation

Takumi Koshiba (Kyushu University, Japan)

SS 2-3 Mitochondria as drug target –from parasites to cancer cells–

Kiyoshi Kita (Nagasaki University, Japan)

SS 3-1 October 31 9:00~10:25

<Diversity of mitochondrial diseases-1>

Chairperson: Kei Murayama (Chiba Children's Hospital, Japan)

Atsuhito Takeda (Hokkaido University, Japan)

SS 3-1-1 The diversity of mitochondrial diseases: An overview

Kei Murayama (Chiba Children's Hospital, Japan)

SS 3-1-2 Mitochondrial cardiomyopathies in children

Atsuhito Takeda (Hokkaido University, Japan)

SS 3-1-3 Clinical, molecular and genetic characteristics of mitochondrial hepatopathy in Japan

Masaru Shimura (Chiba Children's Hospital, Japan)

SS 3-1-4 The Genetic Basis of Leigh Syndrome

David Thorburn (Murdoch Childrens Research Institute & University of Melbourne, Australia)

Sponsor: JCR Pharmaceuticals Co., Ltd.

SS 3-2

October 31 10:50~12:30

<Diversity of mitochondrial diseases-2>

Chairperson: Kei Murayama (Chiba Children's Hospital, Japan)

Atsuhito Takeda (Hokkaido University, Japan)

SS 3-2-1 Clinical presentations in neonatal onset mitochondrial disorders

Taro Nagatomo (Ehime Prefectural Central Hospital, Japan)

SS 3-2-2 MELAS: pathogenic mechanism and treatments

Yasutoshi Koga (Kurume University, Japan)

SS 3-2-3 Genetic Diagnosis of Mitochondrial Disease in Korea

Beom-Hee Lee (Asan Medical Center Children's Hospital, University of Ulsan College of Medicine, Korea)

SS 3-2-4 Diagnosis Challenge of Mitochondrial Disorders in Clinical Practice

Fang Fang (Beijing Children's Hospital of Capital Medical University, China)

Sponsor: JCR Pharmaceuticals Co., Ltd.

SS 4

October 31 14:35~16:05

< The impact of mtDNA mutations on mitochondrial diseases >

Chairperson: Masakazu Mimaki (Teikyo University, Japan)

SS 4-1 Overview-mtDNA medicine

Yu-ichi Goto (National Center of Neurology and Psychiatry, Japan)

SS 4-2 iPSC-based modeling of mitochondrial diseases toward drug discovery

Hideyuki Hatakeyama (National Center of Neurology and Psychiatry, Japan)

SS 4-3 Molecular pathogenesis of mitochondrial diseases caused by tRNA modification deficiency

Tsutomu Suzuki (The University of Tokyo, Japan)

SS 5

October 31 16:35~17:55

< Frontier of therapy: focusing the mechanism >

Chairperson: Yasutoshi Koga (Kurume University, Japan)

SS 5-1 Frontier of therapy: focusing the mechanism

Yasutoshi Koga (Kurume University, Japan)

SS 5-2 5-AMINOLEVULINIC ACID AND FE CAN BRING A PERMANENT CURE FOR MITOCHONDRIAL RESPIRATORY CHAIN DISORDERS.

Akira Ohtake (Saitama Medical University, Japan)

SS 5-3 Development of a novel mitochondrial drugs

Takaaki Abe (Tohoku University, Japan)

SS 5-4 Frontline of drug development of L-Arginine and Sodium pyruvate

Yasutoshi Koga (Kurume University, Japan)

Sponsor: Novo Nordisk

SS 6-1

November 1 9:00~10:30

< Fission, Fusion, Autophagy-1 >

Chairperson: Nobutaka Hattori (Juntendo University, Japan)

SS 6-1-1 **Autophagosome morphogenesis upon Parkin-mediated mitophagy**

Koji Yamano (Tokyo Metropolitan Institute of Medical Science, Japan)

SS 6-1-2 **Autophagy and mitophagy regulation by small chemicals**

Shinji Saiki (Juntendo University, Japan)

SS 6-1-3 **Mieap-regulated mitochondrial quality control and cancer: a new function of tumor suppressor p53**

Hirofumi Arakawa (National Cancer Center Research Institute, Japan)

Sponsor: Sumitomo Dainippon Pharma Co.,Ltd

SS 6-2

November 1 13:00~14:30

< Fission, Fusion, Autophagy-2 >

Chairperson: Nobutaka Hattori (Juntendo University, Japan)

SS 6-2-1 **Mitochondrial dysfunction and Parkinson's disease**

Taku Hatano (Juntendo University, Japan)

SS 6-2-2 **Role of MITOL in mitochondrial dynamics and diseases**

Shigeru Yanagi (Tokyo University of Pharmacy and Life Sciences, Japan)

SS 6-2-3 **Molecular imaging for mitochondrial diseases**

Masamichi Ikawa (University of Fukui, Japan)

Sponsor: Sumitomo Dainippon Pharma Co.,Ltd