

**The 7th Ann Mtg (2004) – International Symposium –
Neuronal Migration Disorders and Childhood Epilepsies**

Date April 16 - 17, 2004
Venue The Yayoi Memorial Hall
 8-1, Kawada-cho, Shinjuku-ku,
 Tokyo 162-8666, Japan

Day 1

Friday, April 16

 **Day 2**

08:15	REGISTRATION
08:55	Opening Address ○ Makiko OSAWA Department of Pediatrics, Tokyo Women's Medical University, Tokyo, Japan
09:00	【Cortical Development, Normal and Abnormal – OVERREVIEW】 <p style="text-align: right;">Chairpersons : <i>Curatolo P</i> <i>Takahashi T</i></p>
09:00-09:45 1	Visualization of neuronal migration in the developing cerebral cortex ○ <u>Kazunori NAKAJIMA</u> ^{①②} ①Department of Anatomy, Keio University School of Medicine, Tokyo, Japan ②Department of Molecular Neurology, Institute of DNA Medicine, Jikei University School of Medicine, Tokyo, Japan
09:45-10:30 2	Neuronal migration disorder, genetics and epileptogenesis ○ <u>Renzo GUERRINI</u> Division of Child Neurology and Psychiatry, University of Pisa & IRCCS Foundation Stella Maris, Pisa, Italy

<p>10:30-10:55 3</p>	<p>Cortical malformations and pediatric epilepsy: A molecular genetic approach</p> <p>○ <u>Ganeshwaran H. MOCHIDA</u></p> <p>Department of Neurology, Howard Hughes Medical Institute and Beth Israel Deaconess Medical Center, Boston, Massachusetts, USA</p>
<p>10:55</p>	<p>【Neuronal Migration Disorders in Human – Clinics and Molecular Genetics】</p> <p style="text-align: right;">Chairpersons : Golden JA Ohtahara S</p>
<p>10:55-11:25 4</p>	<p>Genotype/phenotype correlation in classical lissencephaly and subcortical band heterotopia</p> <p>○ <u>Richard J. LEVENTER</u></p> <p>Royal Children’s Hospital, Murdoch Children’s Research Institute, University of Melbourne, Melbourne, Australia</p>
<p>11:25-11:50 5</p>	<p>X-linked lissencephaly with abnormal genitalia (XLAG) as a tangential migration disorder causing intractable epilepsy</p> <p>○ <u>Mitsuhiro KATO</u> ①, William B. DOBYNS ②</p> <p>①Department of Pediatrics, Yamagata University School of Medicine, Yamagata, Japan ; ②Department of Human Genetics, Neurology and Pediatrics, The University of Chicago, Chicago, USA</p>
<p>11:50-12:20 6</p>	<p>Classification, epileptic history and genesis of epileptic discharges in patients affected by periventricular nodular heterotopia</p> <p>○ <u>Giorgio BATTAGLIA</u>①, Luisa CHIAPPARINI②, Elena FRERI③, Laura TASSI④, Stefania BASSANINI①, Ludovico D’INCERTI②, Franco TARONI⑤, Giorgio Lo RUSSO④, Roberto SPREAFICO① and Tiziana GRANATA③</p> <p>Departments of Experimental Neurophysiology①, Neuroradiology②, Child Neurology, Genetics and Biochemistry⑤, Neurological Institute “C.Besta”, Milan, Italy Epilepsy Surgery Center “C.Munari”④, Niguarda General Hospital, Milan, Italy</p>

12:20-13:20	LUNCH
13:20	<p>【NMDs in Human - Clinics and Molecular Genetics (cont'd) 】</p> <p style="text-align: center;">Chairpersons : Leventer RJ Watanabe K</p>
13:20 –13:50	<p>Schizencephaly : Clinical aspects and controversial role of EMX2</p> <p>7</p> <p>○ <u>Tiziana GRANATA</u>^①, Giorgio BATTAGLIA^②, Luisa CHIAPPARINI^③, Claudio CACCIA^④, Elena FRERI^①, Francesca RAGONA^①, Veronica SETOLA^②, Ludovico D'INCERTI^③, Franco TARONI^④</p> <p>Departments of Child Neurology^①, Experimental Neurophysiology^②, Neuroradiology^③, Genetics and Biochemistry^④, Neurological Institute “C.Besta”, Milan, Italy</p>
13:50-14:10	<p>Clinical aspects of hermimegalencephaly and its neuro-pathological findings in surgically treated cases</p> <p>8</p> <p>○ <u>Masayuki SASAKI</u>^①, Kenji SUGAI^①, Kaku NIIMURA^②, Taisuke OTSUKI^②, Kunimasa ARIMA^③, Masayuki ITO^③</p> <p>Department of Child Neurology^①, Neurosurgery^②, and Neuropathology^③, National Center Hospital for Mental, Nervous and Muscular Disorders, National Center of Neurology and Psychiatry, Kodaira, Tokyo, Japan</p>
14:10-14:35	<p>Molecular and neurological findings in Zellweger syndrome</p> <p>9</p> <p>○ <u>Nobuyuki SHIMOZAWA</u>^①, Tomoko NAGASE^①, Yasuyuki SUZUKI^②, Naomi KONDO^①</p> <p>①Department of Pediatrics, Gifu University School of Medicine, Gifu, Japan ②Medical Education Development Center, Gifu University School of Medicine, Gifu, Japan</p>
14:35	<p>【NMDs in Human – Clinics and Molecular Genetics (cont'd)】</p> <p style="text-align: center;">Chairpersons: Granata T Abe T</p>

<p>14:35-15:10 10</p>	<p>Drug-resistant seizures in tuberous sclerosis: From molecular biology to epileptogenesis</p> <p>○ <u>Paolo CURATOLO</u></p> <p>Child Neurology Unit, Department of Neurosciences, Tor Vergata University, Rome, Italy</p>
<p>15:10-15:35 11</p>	<p>Long-term prognosis of epilepsies and related seizures disorders in Fukuyama-type congenital muscular dystrophy</p> <p>○ <u>Mieko YOSHIOKA</u></p> <p>Section of Pediatric Neurology, Kobe City Pediatric and General Rehabilitation Center for the Challenged, Kobe, Hyogo, Japan</p>
<p>15:35-16:00</p>	<p>INTERMISSION (COFFEE BREAK)</p>
<p>16:00</p> <p>【Neuroimaging in Human】</p> <p style="text-align: right;">Chairpersons : Woermann FG Iinuma K</p>	
<p>16:00-16:45 12</p>	<p>Structure and function in malformations of cortical development: Qualitative MRI, MR-morphometry and MRI</p> <p>○ <u>Friedrich G. WOERMANN</u></p> <p>MRI-Unit, Mara Hospital, Bethel Epilepsy Center, Bielefeld, Germany</p>
<p>16:45-17:10 13</p>	<p>New approach in analysis of FDG-PET and brain perfusion SPECT imaging in epilepsies</p> <p>○ <u>Hiroshi MATSUDA</u>^①, Etsuko IMABAYASHI^①, Kaku NIIMURA^②, Taisuke OTSUKI^②</p> <p>Department of Radiology^①, and Neurosurgery^② National Center Hospital for Mental, Nervous and Muscular Disorders, National Center of Neurology and Psychiatry, Kodaira, Japan</p>

<p>17:10-17:35</p> <p>14</p>	<p>The changing MRI appearance of polymicrogyria: A consequence of myelination</p> <p>○ <u>Jun-ichi TAKANASHI</u>^①, Hiroko TADA^①, A.James BARKOVICH^②</p> <p>①Department of Pediatrics, Graduate School of Medicine Chiba University, Chiba, Japan</p> <p>②Department of Radiology, University of California San Francisco, USA</p>
<p>17:35</p> <p>【Neurosurgery in Human】</p> <p style="text-align: right;">Chairpersons : Tanaka T Otsubo H</p>	
<p>17:35-18:10</p> <p>15</p>	<p>Clinical characteristics and strategy for surgical treatment in pediatric epileptic patients with cortical dysplasia</p> <p>○ <u>Hiroyuki SHIMIZU</u></p> <p>Department of Neurosurgery, Tokyo Metropolitan Neurological Hospital, Fuchu, Tokyo, Japan</p>
<p>18:10-18:30</p> <p>16</p>	<p>Prognosis of five surgical cases of early epileptic encephalopathy with suppression burst with large cortical dysplasia</p> <p>○ <u>Kenji SUGAI</u>^①, Mari OKADA^①, Satoru KINOSHITA^①, Maki OOSAWA^①, Yoshinao FUJIKAWA^①, Hirohumi KOMAKI^①, Eiji NAKAGAWA^①, Masayuki SASAKI^①, Taisuke OOTSUKI^②, Hiroyuki SHIMIZU^③</p> <p>Department of Child Neurology^① and Neurosurgery^②, National Center of Neurology and Psychiatry, Kodaira, Tokyo, Japan</p> <p>③Department of Neurosurgery, Tokyo Metropolitan Neurological Hospital, Fuchu, Tokyo, Japan</p>

Day 2		Saturday, April 17	
08:00	REGISTRATION		
08:30	<p>【Animal Model Studies】</p> <p style="text-align: right;">Chairpersons: Battaglia G Nakajima K</p>		
8:30-9:15 17	<p>L1S1 +/- mice exhibit multiple defects in non-radial cell migration</p> <p>○ Jeffrey GOLDEN^{①②}, Ilya NASRALLAH^①, MacLean PANCOAT^②, Matthew McMANUS^①, Anthony WYNshaw-BORIS^③</p> <p>①Neuroscience Program, University of Pennsylvania School of Medicine, Philadelphia, PA, USA</p> <p>②Department of Pathology, Children’s Hospital of Philadelphia and the University of Pennsylvania School of Medicine, Philadelphia, USA</p> <p>③Department of Pediatrics, University of California, San Diego, CA, USA</p>		
9:15-9:40 18	<p>Molecular pathogenesis of neuronal migration disorders, with special reference to low-dose irradiation and cell- cell interactions</p> <p>○ Shinji FUSHIKI, Kyoko ITOH</p> <p>Department of Pathology and Applied Neurobiology, Kyoto Prefectural University of Medicine Graduate School of Medical Science, Kyoto, Japan</p>		
09:45	<p>【Animal Model Studies (cont'd)】</p> <p style="text-align: right;">Chairpersons: Mochida GH Sugai K</p>		

<p>9:45-10:10 19</p>	<p>Seizures and brain malformations in model mice for glycine encephalopathy</p> <p>○ <u>Shigeo KURE</u>^①, Akiko ICHINOUE^①, Sato Kenichi SATO^①, Kanako KOJIMA^①, Kazuie IINUMA^②, Yoichi MATSUBARA^①</p> <p>Department of ①Medical Genetics and ②Pediatrics, Tohoku University Graduate School of Medicine, Sendai, Japan</p>
<p>10:10-10:35 20</p>	<p>Experimental neuronal migration disorders caused by NMDA receptor activation in hamsters</p> <p>○ <u>Tomoyuki TAKANO</u></p> <p>Department of Pediatrics, Shiga University of Medical Science, Otsu, Japan</p>
<p>11:00 【Animal Model Studies (cont'd)】</p> <p style="text-align: right;">Chairpersons : Fushiki S Kakita A</p>	
<p>10:35- 11:00 21</p>	<p>Clinical application of the experimental cortical dysplasia in rats</p> <p>○ <u>Tatsuya TANAKA</u>, Hiroshige TSUDA, Kiyotaka HASHIZUME</p> <p>Department of Neurosurgery, Asahikawa Medical College, Asahikawa, Japan</p>
<p>11:00- 11:25 22</p>	<p>Microdysgenesis in hippocampus of mouse and epilepsy</p> <p>○ <u>Tsunekazu YAMANO</u></p> <p>Department of Pediatrics, Osaka City University Graduate School of Medicine, Osaka,</p>
<p>11:25- 12:10 23</p>	<p>Single cell molecular pathogenesis of cortical dysplasias</p> <p>○ <u>Peter Benjamin CRINO</u></p> <p>Department of Neurology, University of Pennsylvania, Philadelphia, PA, USA</p>
<p>12:10-13:10</p>	<p>INTERMISSION</p>

13:10

【Neuropathology in Human】

Chairpersons: Crino PB
Yamano K

13:10-13:35

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Neuropathology of NMD and epileptogenic cortical dysplasia

○ Akiyoshi KAKITA

Department of Pathological Neuroscience, Brain Research Institute, Niigata University, Niigata, Japan

13:35- 14:00

25

Activated remodeling and NMDA receptor in cortical dysplasia

○ Hideo YAMANOUCHI

Department of Pediatrics, Dokkyo University School of Medicine, Tochigi, Japan

14:00- 14:20

26

Neuropathologic findings in dysembryoplastic neuroepithelial tumor (DNT): Correlation with cortical dysplasia

○ Ryoichi SAKUTA^{①②}, Hiroshi OTSUBO^③

①Department of Pediatrics, Koshigaya Hospital, Dokkyo University School of Medicine, Koshigaya, Saitama, Japan

②Division of Pathology, The Department of Paediatric Laboratory Medicine, and ③The Divisions of Neurology, The Hospital for Sick Children, University of Toronto, Toronto,

14:20

【Neurophysiology in Human】

Chairpersons: Guerrini R
Yamatogi Y

14:20- 14:55 27	<p>Neurophysiological findings of neuronal migration disorders : EEG, ECoG and MEG</p> <p>○ Hiroshi OTSUBO^①, Walter J.HADER^②, Koji IIDA^①, Makoto OISHI^①, Chiyuki OKUDA^①, Ayako OCHI^①, James T, RUTKA^②, O.Carter SNEAD III^①</p> <p>Divisions of Neurology^① and Neurosurgery^②, The Hospital for Sick Children, Toronto, Ontario, Canada</p>
14:55- 15:15 28	<p>Dynamic statistical parametric mapping (DSPM) for analyzing the magnetoencephalographic epileptiform discharges in patients with epilepsy</p> <p>○ Hideaki SHIRAISHI^①, Susanne KNAKE^②, Steven M. STUFFLEBEAM^②, Seppo P. AHLFORS^②, Akira SUDO^①, Naoko ASAHINA^①, Eric HALGREN^②, Keisaku HATANAKA^③, Shinobu KOHSAKA^①, Shinji SAIATOH^①</p> <p>①Department of Pediatrics, Hokkaido Graduate School of Medicine, Sapporo, Japan ②Athinoula A. Martinos Center for Biomedical Imaging, Massachusetts General Hospital/ Harvard Medical School, Boston, USA ③Department of Applied Physics, Okayama University of Science, Okayama, Japan</p>
15:15- 15:40	INTERMISSION (COFFEE BREAK)
15:40 【Free Papers】	<p style="text-align: right;">Chairpersons: Fujiwara T Nijima S</p>

<p>15:40- 16:00 29</p>	<p>Tuberous sclerosis: Clinical profile and magnetic resonance spectroscopy (MRS) of tubers (Asian Research Award Lecture)</p> <p>○ <u>Veena KALRA</u>, Sheffali GULATI, Tariq SHAH*, Surbhi LEEKHA, Chiranjeev DASH, Rama JAYASUNDAR*, Devashish SAINI, R.M. PANDEY**</p> <p>From the Departments of Pediatrics, NMR*, Biostatistic**, All India Institute of Medical Sciences, New Delhi, India</p>
<p>16:00- 16:25 30</p>	<p>Pattern of childhood epilepsies with neuronal migration disorders in Oman (Asian Research Award Lecture)</p> <p>○ <u>Roshan KOUL</u>①, Alexander CHAKO①, Adila ALKINDY①, Zakiya Al-LAMKI①, Rajeev JAIN②, Dilip SANKHALA②, Riaz AHMED③</p> <p>①Pediatric Neurology, Department of Child Health, Sultan Qaboos University Hospital, Muscat, Oman ②Radiodiagnosis, Sultan Qaboos University Hospital, Muscat, Oman ③Department of Child Health, Royal Hospital, Muscat, Oman</p>
<p>31</p>	<p>A patient associated with trigonocephaly and hemicephalic polymicrogyria</p> <p>○ <u>Toshiyuki YAMAMOTO</u>①, Kenji KUROSAWA①, Ken-ichi SEKIDO②, Noriko AIDA ③</p> <p>Department of Medical Genetics①, Neurosurgery② and Radiology③ and Kanagawa Children's Medical Center, Yokohama, Kanagawa, Japan</p>
<p>16:25 【Free Papers (cont'd)】</p> <p style="text-align: right;">Chairperson: Izumi T</p>	

<p>16:25- 16:50</p> <p>32</p>	<p>Brain malformation subsequent to intrauterine fetal demise of a single twin</p> <p>○ Akihisa OKUMURA^①, Fumio HAYAKAWA^②, Toru KATO^①, Takeshi TSUJI^①, Tamiko NEGORO^①, and Kazuyoshi WATANABE^③</p> <p>①Department of Pediatrics, Nagoya University Graduate School of Medicine, Nagoya, Aichi, Japan ②Department of Pediatrics, Okazaki City Hospital, Okazaki, Aichi, Japan ③Aichi Shukutoku University, Nagakute, Aichi, Japan</p>
<p>33</p>	<p>Miller-Dieker syndrome associated with tethered cord: A case report</p> <p>○ Jao-Shwann LIANG^①, Sheing-Jye CHEN^①, Steven SF PENG^②, Meng-Fai KUO^③, Wang-Tsao LEE^①</p> <p>Departments of Pediatrics^①, Radiology^②, and Surgery^③, National Taiwan University Hospital, Taipei, Taiwan</p>
<p>16:50</p> <p>【Free Papers (cont'd)】</p> <p style="text-align: right;">Chairpersons : Ito M Yamanouchi H</p>	
<p>16:50- 17:30</p> <p>34</p>	<p>Clinical analysis of patients with epilepsy and localized cortical dysgenesis</p> <p>○ Makoto FUNATSUKA, Hirokazu OGUNI, Makiko OSAWA</p> <p>Department of Pediatrics, Tokyo Women's Medical University, Tokyo, Japan</p>

<p>35</p>	<p>Two patients with subependymal heterotopia and West syndrome</p> <p>○ <u>Osamu KANAZAWA</u>^①, Mutsuo SASAGAWA^②, Jun TOHYAMA^①, Noriyuki AKASAKA^①, Takanori KAMIMURA^①, Shigeki KAMEYAMA^③</p> <p>Department of Pediatrics^①, Psychiatry^② and Neurosurgery^③, Epilepsy Center, National Nishi-Niigata Central Hospital, Niigata, Japan</p>
<p>36</p>	<p>Localization - related epilepsy with transient infantile spasms in two patients with lissencephaly</p> <p>○ Seiko ITOMI^①, Takeshi TSUJI^②, Yoko KONDO^②, Yuko KAKIZAWA^②, Yoshiko ISHIGURO^③, Toru KATO^②, Akihisa OKUMURA^②, Tamiko NEGORO^②, Kazuyoshi WATANABE^④</p> <p>①Departments of Pediatrics, Chubu-Rosai Hospital, Nagoya, Aichi, Japan ②Department of Pediatrics, Nagoya University School of Medicine, Nagoya, Aichi, Japan ③Department of Pediatrics, Aichi Aoitori Institution of Disabled, Nagoya, Aichi, Japan ④Aichi Shukutoku University, Nagakute, Aichi, Japan</p>
<p>19:40</p>	<p>ADJOURN</p>
<p>【Free Papers - Read by Title】</p>	
<p>37</p>	<p>Outcomes of West syndrome. Experience in a referral hospital in Thailand</p> <p>○ <u>Anannit VISUDTIBHAN</u>, Surang CHIEMCHANYA, Pongsakdi VISUDHIPHAN</p> <p>Division of Neurology, Department of Pediatrics, Faculty of Medicine, Ramathibodfi Hospital, Mahidol University, Bangkok, Thailand</p>
<p>38</p>	<p>(Withdrawn)</p>
<p>39</p>	<p>Infantile intractable seizures: Hemimegalencephaly & hemiconvulsions - A case report</p> <p>○ <u>Riaz Ahmed SYED</u>^①, Roshan Lal KOUL^②, Saleh AL KHUSAIBY</p> <p>Department of Child Health, Royal Hospital^① & University Hospital^②, Muscat, Oman</p>