Exploring Autism Research Collaboration between Japan and the United States

Joint Academic Conference on Autism Spectrum Disorders

December 1-3, 2011

Craig J. Newschaffer
Hideo Honda
Kenji Tsuchiya
Masatsugu Tsujii
Joseph Piven
Atsushi Senju
Atsuko Gunji

Kenji Mori
Kazuhiko Nakamura
Hidenori Yamasue
Joachim Hallmayer
Shigeo Uchino
Toru Takumi

Deborah Fein
Yoko Kamio
Annette Estes
Connie Kasari
Masahiko Inoue

Auspices
Executive Committee of Joint Academic Conference on Autism Spectrum Disorders
Delegare
Secretary General
Makiko Kaga
Masatsugu Tsujii

Joint-sponsor
Autism Speaks
The Nippon Foundation

Support
Japan Developmental Disorders Network (JDD-Net)
Ministry of Education, Culture, Sports, Science & Technology in Japan
Ministry of Health, Labour and Welfare in Japan
National Center of Neurology and Psychiatry
Japanese Society of Child Neurology

Venue: The Nippon Zaidan Building
Address: 1-2-2, Akasaka, Minato-ku, Tokyo, 107-8404
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Delegate and Chair of Scientific Committee         Makiko Kaga
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Address: 1-2-2, Akasaka, Minato-ku, Tokyo, 107-8404
Phone: + 81-3-6229-5111
FAX:  + 81-3-6229-5110
Program

December 1st, 2011, Thursday

Opening Session 13:00 - 13:30
Opening remarks
Executive committee
Ministry of Education, Culture, Sports, Science & Technology in Japan
Ministry of Health and Labour in Japan
Autism Speaks
JDD-Net

Session 1: Epidemiology 13:30 - 15:30
Chairs: Craig J. Newschaffer & Noriyoshi Takei

O-I-1
What EARLI study has made clear in cohort with autistic siblings? Has autism really been increased? Craig J. Newschaffer 45 min

O-I-2
How can epidemiological study contribute to understanding ASD? Hideo Honda 30min

O-I-3
Cohort Studies in Japan: Capturing Early Trajectories of Children with ASD. Kenji Tsuchiya 15 min

O-I-4
Importance of continuous intervention in ASD adults. Masatsugu Tsujii 30 min

Break 15:30 - 15:45

Session II: Cognitive neuroscience 15:45 - 17:30
Chairs: Connie Kasari & Masumi Inagaki

O-II-1
Broader autism phenotype and its neuropsychological symptom. Joseph Piven 30 min

O-II-2
Developmental social neuroscience on ASD. Atsushi Senju 45 min

O-II-3
Semantic encoding of face in children with ASD: Neurophysiological study. Atsuko Gunji 30 min

Welcome reception 18:30 -
December 2nd, 2011, Friday

Session III: Neuroimaging  
9:00 - 11:00  
Chairs: Joachim Hallmayer & Toshiro Sugiyama

O-III-1  
Longitudinal imaging study (IBIS) in ASD.  
Joseph Piven  
45 min

O-III-2  
Functional MRI and MRS studies in ASD.  
Kenji Mori  
15 min

O-III-3  
PET scan and neurotransmitters in ASD.  
Kazuhiko Nakamura  
30 min

O-III-4  
Oxytocin, Sexually-dimorphic feature of social brain, and autistic social dysfunction.  
Hidenori Yamasue  
30 min

Break  
11:00 - 11:15

Session IV: Genetics, molecular biology and animal model studies  
11:15 - 13:15  
Chairs: Joseph Piven & Hideo Sugie

O-IV-1  
The results and suggestions from genome wide projects.  
Joachim Hallmayer  
45 min

O-IV-2  
The significance of SHANK 3 in ASD.  
Shigeo Uchino  
30 min

O-IV-3  
Significance of model mouse of ASD.  
Toru Takumi  
45 min

Lunch  
13:15 - 14:00

Poster Session:  
14:00 - 17:30

I. Epidemiology  
(Chairs: Craig J Newschaffer & Hideo Honda)
II. Cognitive neuroscience  
(Chairs: Connie Kasari & Atsushi Senju)
III. Neuroimaging  
(Chairs: Joseph Piven & Kazuo Nakamura)
IV. Genetics, molecular biology, biomarkers and animal model studies  
(Chairs: Joachim Hallmayer & Toru Takumi)
V. Scientific study of early diagnosis, intervention and prognosis of ASD  
(Chairs: Annette Estes & Masahiko Inoue)

Gala dinner  
18:30 -
December 3rd, 2011, Saturday

**Session V: Scientific study of diagnosis and treatment (1) 9:00 - 11:00**

*Chairs: Annette Estes & Toshihide Kuroki*

**O-V-1**
Early detection with a focus on procedures and quantified diagnostic criteria.  
Deborah Fein  45 min

**O-V-2**
Early diagnosis of ASD in toddlers and school children: findings from community studies and national surveys in Japan.  
Yoko Kamio  30 min

**O-V-3**
Early intervention of ASD: Early Start Denver Model and parent-mediated intervention.  
Annette Estes  45 min

**Break**  11:00 - 11:15

**Session VI: Scientific study of diagnosis and treatment (2) 11:15 - 13:00**

*Chairs: Deborah Fein & Tokio Uchiyama*

**O-VI-1**
School-based intervention and treatment programs for children with ASD.  
Connie Kasari  45 min

**O-VI-2**
Intervention and long term prognosis of ASD.  
Masahiko Inoue  30 min

**O-VI-3**
Children with optimal outcome.  
Deborah Fein  30 min

**Closing Session**  13:00 -

Closing remarks
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ポスタープログラム

December 2, 2011, Friday 14:00 – 17:30

**Session I: Epidemiology**

**Chairs**: Craig J. Newschaffer & Hideo Honda

**P-I-1**
Prevalence of autism spectrum disorders, mental retardation and cerebral palsy in the western region of Nagoya city, Japan
Satoshi Sumi1), Takeshi Nishiyama2), Taishi Miyachi3) Kimie Ohya3), Masayuki Imaeda3)
1) Nagoya West District Care Center for Disabled Children
2) Clinical Trial Management Center, Nagoya City University Hospital
3) Department of Pediatrics, Nagoya City University Hospital

**P-I-2**
Altered plasma glutamate and glutamine levels in children with high-functioning autism
Chie Shimmura1), Shiro Suda2), Kenji Tsuchiya3), Kazuhiko Nakamura1), Masatsugu Tsujii3),
and Nori Takei2)3), Norio Mori3,2)
1) Department of Psychiatry & Neurology, Hamamatsu University School of Medicine
2) Research Center for Child Mental Development, Hamamatsu University School of Medicine
3) Faculty of Sociology, Chukyo University,
4) Division of Psychological Medicine, Institute of Psychiatry, King's college London,

**P-I-3**
Japan Environment and Children's Study. -Identify the environmental harmful factors affecting children's growth and health, and research the relationship between the factors and children's health condition
Masutomo Miyao1), Yukihiro Ohya1), Mitihiro Kitagawa3), Kei Mori2), Eisaku Toda2)
1) Mental support center (National Center For Child Health and Development)
2) National Center (National Institute for Environmental Study

**Session II: Cognitive neuroscience**

**Chairs**: Joseph Piven & Atsushi Senju

**P-II-1**
Differences in cognitive characteristics of between metaphor and sarcasm in Asperger syndrome
Hitoshi Uchiyama, Tatsuya Koeda
Department of Education, Faculty of Regional Sciences, Tottori University

**P-II-2**
Oxytocin effect in young males with autism spectrum disorders: An eye-tracking study.
Hirotaka Kosaka1), Toshih Munesue2), Daisuke N Saito2), Takeshi Fujii 2), Hisakazu Yanaka2), Makoto Ishitobi3), Mizuki Asano1), Kosuke Narita6), Tetsuhito Murata3), Masao Omori7), Hidehiko Okazawa8), Norihiro Sadato9), Yuji Wada1)
P-II-3
Autistic children's understanding of prosody: Evidence from eye-tracking data.
Yui Miura1), Tomoko Matsui2), Hiroshi Fujino3), Hiroo Osanai4), Yoshikuni Tojo5)
1) Research Center for Child Mental Development, Kanazawa University
2) Center for Research in International Education, Tokyo Gakugei University
3) Department of Special Support Education, Musashino Higashi Gakuen
4) College of Education, Ibaraki University

P-II-4
Self-face recognition in children with autism spectrum disorders: A near-infrared spectroscopy study
Yosuke Kita1), Atsuko Gunji1), Yuki Inoue1), Takaaki Goto1), Kotoe Sakihara1),
Makiko Kaga1), Masumi Inagaki1), Toru Hosokawa2)
1) Department of Developmental Disorders, National Institute of Mental Health, National Center of Neurology and Psychiatry
2) Shimada Rehabilitation Center
3) Fuji Tokoha University and Graduate School
4) Graduate School of Education, Tohoku University

P-II-5
Impaired Prefrontal Hemodynamic Maturation in Autism and Unaffected Siblings.
Yuki Kawakubo1), Hitoshi Kuwabara1), Ayaka Ishii-Takahashi2), Toshiaki Kono1), Kiyoto Kasai1), Yukiko Kano1)
1) Department of Child Psychiatry, Graduate School of Medicine, University of Tokyo
2) Department of Neuropsychiatry, Graduate School of Medicine, University of Tokyo

P-II-6
Can EEG characteristics predict later development of epilepsy in children with autism spectrum disorders?
Hideaki Kanemura, Fumikazu Sano, Tomoko Tando, Masao Aihara
Department of Pediatrics, Faculty of Medicine, University of Yamanashi, Yamanashi, Japan

P-II-7
Lateralized theta wave MEG coherence and language performance in 2- to 5-year-old children.
Mitsuru Kikuchi, Toshio Munesue, Haruhiro Higashida, Yoshio Minabe
Research Center for Child Mental Development, Kanazawa University

P-II-8
Electrophysiological evaluation of visual impairment in ASD
Takao Yamasaki1), Takako Fujita2), Yoko Kamio3) and Shozo Tobimatsu1)
Session III: Neuroimaging

Chairs: Joachim Hallmayer & Kazuhiko Nakamura

P-III-1
Reduced acetylcholinesterase activity in the fusiform gyrus in adults with autism spectrum disorders.
Katsuaki Suzuki, Yasuomi Ouchi, Kazuhiko Nakamura, Masatsugu Tsujii, Toshirou Sugiyama, Norio Mori.
Research Center for Child Mental Development, Hamamatsu University School of Medicine,

P-III-2
Deviated medial frontal glutamine and N-acetylaspartate concentrations in autism: A original study and meta-analysis of proton-magnetic resonance spectroscopy.
Yuta Aoki
Department of Neuropsychiatry, Graduate School of Medicine, The University of Tokyo,

P-III-3
Reduced Medial Prefrontal Activity underlies Autistic Social Judgments of Nonverbal-verbal Conflicts
Takamitsu Watanabe
Department of Physiology, Graduate School of Medicine, The University of Tokyo

Session IV: Genetics, molecular biology, biomarkers and animal model studies

Chairs: Joseph Piven & Toru Takumi

P-IV-1
Genetic analysis of patients with autistic spectrum disorder.
Takanori Yamagata, Karin Kojima, Ayumi Matsumoto, Masato Mori, Eriko Jimbo, Mariko Y. Momoi.
Department of Pediatrics, Jichi Medical University

P-IV-2
Genetic study of Japanese autism and fragile X syndrome
Koichi Adachi1,2, Noriko Itaba1,2, Tsukasa Sasaki1,2, Kenji Yamamoto3, Hideo Matumoto3, Nobumasa Kato1, Kousaku, Ohno2, Eiji Nanba3
1) Division of Functional Genomics, Research Center for Bioscience and Technology, Tottori University
2) Division of Child Neurology, Department of Brain and Neurosciences, Faculty of Medicine, Tottori University
3) Department of Physical and Health Education, Graduate School of Education, The University of Tokyo
4) Department of Psychiatry, Kitasato University School of Medicine
5) Department of Psychiatry, Course of Specialized Clinical Science
6) Department of Psychiatry, School of Medicine, Showa University
* present affiliation: Division of Molecular and Genetic Medicine, Institute of Regenerative Medicine and Biofunction, Graduate School of Medical Sciences, Tottori University

**P-IV-3**

Autism-associated gene expression signatures in peripheral blood leucocytes
Yuki Kuwano
Department of Stress Science, Institute of Health Bioscience, The University of Tokushima Graduate School

**P-IV-4**

Analysis of genetic inheritance in autism spectrum disorders by whole exome sequencing.
Hitoshi Kuwabara1),*, Takaumi Shimada2),*, Miki Bundo2), Chihiro Kakiuchi3), Kazuya Iwamoto2), Mamoru Tochigi 3), Tsukasa Sasaki1), Yukiko Kano1), Kiyoto Kasai1)

1) Department of Child Psychiatry, Graduate School of Medicine, University of Tokyo
2) Department of Molecular Psychiatry, Graduate School of Medicine, University of Tokyo,
3) Department of Neuropsychiatry, Graduate School of Medicine, University of Tokyo
4) Office for Mental Health Support, University of Tokyo

* These authors contributed equally to this work

**Session 5: Scientific study of early diagnosis, intervention and prognosis of ASD**

**Chairs** Annette Estes & Masahiko Inoue

**P-V-1**

Is the comprehensive summer treatment program for children with ADHD effective to autism spectrum disorder comorbid with ADHD?
Yushiro Yamashita1,2, Chiyomi Egami1, Yasuhiro Tada2, Akiko Mukasa2, Chidzuru Anai2, Yuko Honda2, Chie Kunisaki2, Shinichiro Nagamitsu1, and Tojojiro Matsuishi1,2

1) Department of Pediatrics & Child Health, Kurume University School of Medicine
2) NPO Kurume STP

**P-V-2**

The application of the M-CHAT to the Japanese health check-up system
Naoko Inada, Yoko Kamio
Department of Child and Adolescent Mental Health, National Institute of Mental Health, National Center of Neurology and Psychiatry

**P-V-3**

Cognitive Behavioral Therapy applied to an Adult with Autism Spectrum Disorder – A Clinical Case Study
Fumiyo Oshima, Emi Ito, Eiji Shimizu
Research Center for Child Mental Development Chiba University
Graduate School of Medicine

**P-V-4**

Similarities in Rorschach inkblot scores between patients with autism spectrum disorders and bipolar disorders.
Toshio Munesue1), Tomoko Muramatsu2), Mitsuru Kikuchi1), Haruhiro Higashida1), Yoshio Minabe1)

1) Research Center for Child Mental Development, Kanazawa University
2) United Graduate School of Child Development, Osaka University

**P-V-5**
A Randomized Controlled Trial of a Cognitive-Behavioral Intervention for the Adults with High-Functioning Autism Spectrum Disorders.

Miho Kuroda 1),2),3) , Yuki Kawakubo 2) , Aya Asami 2) , Hitoshi Kuwabara 2) , Hidenori Yamasue 4) , Yukiko Kano 2) , Yoko Kamio 3)

1) Department of Psychology, Shukutoku University
2) Department of Child Psychiatry, Graduate School of Medicine, University of Tokyo
3) Department of Child and Adolescence Mental Health, National Institute of Mental Health, National Center of Neurology and Psychiatry
4) Department of Neuro Psychiatry, Graduate School of Medicine, University of Tokyo