PPTOX V Preliminary Program

Sunday, 13 November 2016

15:30-16:30 *Opening session:* Welcome and setting the stage
Chairs: Philippe Grandjean (Denmark) and Toshihiro Kawamoto (Japan)
Toshihiro Kawamoto (Japan): Opening/welcome
Jerry Heindel (USA): Expanding the DOHaD perspective in setting research priorities
Peter van den Hazel (The Netherlands): The impact of scientific networks on children's environmental health and DOHaD research
Michihiro Kamijima (Japan): Present status and preliminary results of JECS

16:30-21:00 *Optional Excursion* (Kokura Night)

【Only invitees and participants who paid 10,000 Japanese yen】

16:30 Departure (to Kokura Castle)

17:15 Opening Ceremony

18:15 Move to Mojiko Restaurant

19:00 Banquet

Monday, 14 November 2016

9:00- 10:30 *Session I:* Epigenetics
Chairs: Robert Barouki (France) and Keiko Nohara (Japan)
Jia Chen (USA): Placental epi/genomics as sensors of the in utero environment and predictors of fetal development
Alexandra Binder (USA): The placetomics consortium: Investigating determinants of placental epigenetic patterns in humans- Challenges and opportunities
Yunhui Zhang (China): PBDEs' effects on placental DNA methylation in Chinese newborns
John M.Rogers (USA): Parental tobacco smoke exposure: Epigenetics and the developmental origins of health and disease.

10:30-11:00 Refreshment break

11:00-12:30 *Session II:* Preconceptional Exposures

Chairs: Thaddeus Schug (USA) and Fujio Kayama (Japan)
Bernard Robaire (Canada): Paternal preconception exposures impact on sperm chromatin quality and progeny outcome
Aileen Keating (USA): Germ cell exposure and the ovarian response to ovotoxicants
Kaylon Bruner-Tran (USA): Paternal developmental exposure to TCDD alters the adult sperm and placental epigenome and negatively effects pregnancy outcomes in control partners
Christina Porucznik (USA): Maternal and paternal preconception stress and fecundability

12:30-14:00 Lunch and posters

14:00-15:30 *Session III:* Long-term Implications of Developmental Programming
Chairs: Mihi Yang (Korea) and Gail Prins (USA)
Kevin Osteen (USA): Exposure to an environmental endocrine disrupting chemical promotes transgenerational reproductive dysfunction
Zdenko Herceg (IARC, France): Impact of in utero exposures on the epigenome and cancer susceptibility in childhood
Wei Yan (USA): Sperm small RNAs as the carrier of epigenetic information

15:30-16:00 Refreshment break

16:00-17:30 *Session IV:* Adverse outcome pathways and risk assessment
Chairs: Takehiro Michikawa (Japan) and Ruth Etzel (USA)
Barbara Demeneix (France): Consequences on brain development of early exposure to thyroid disrupting chemicals.
Brenda Eskenazi (USA): Dioxin and Child Health: 40 years after the Seveso Explosion
Muneko Nishijo (Japan): Neurotoxic effects of perinatal dioxin exposure on children in Vietnam: Two birth cohort studies in hot spots of dioxin contamination from Agent Orange
Mark F. Miller (USA): Understanding variability: A key to interpreting data and understanding health risks of early life exposures
Michelle Mabson (USA): Integration of evidence for prenatal carcinogenicity and application for environmental risk assessment

10:30-11:00 *Nurturing Program for Children's Environmental Health Researchers (1)*
Chair: Chisato Mori (Japan)
Joachim Heinrich (Germany): Harmonization of data derived from different birth cohorts and integration in big multicenter consortia. Experiences from two German birth cohorts.

13:00-14:00 *Nurturing Program for Children's Environmental Health Researchers (2)*
Chair: Michihiro Kamijima (Japan)
Junya Kasamatsu (Japan): Introduction of Nurturing Program for Children's Environmental Health Researchers (in Japanese)
Pau-Chung Chen (Taiwan): TBC
Reiko Kishi (Japan): Environmental endocrine-disrupting chemicals and their effects to children: 13 years progress of the Hokkaido Birth Cohort Study

15:30-16:00 *Nurturing Program for Children's Environmental Health Researchers (3)*
Chair: Yukihiro Ohya (Japan)

Soo-Jong Hong (Korea) Pre and postnatal environment and allergic diseases.

17:30-18:15 Additional Session on the Significance and Impact of Epigenetics for the Field and for Public Health
Modulated by Keiko Nohara (Japan) and Robert Barouki (France)

17:30-19:00 *Welcome Party*　　(Event Hall)

18:00-20:00 8th PI Meeting of BiCCA (Birth Cohort Consortium of Asia)
Organized by Eunhee Ha (BiCCA)

Tuesday, 15 November

9:00-10:30 *Sesion V:* Microbiome impacts on early development
Chairs: Alvaro Puga (USA) and TBC (Cheryl S. Rosenfeld (USA)?)
Derrick MacFabe (Canada): Gut microbiota alterations and autism spectrum disorders (TBC)
Cheryl S. Rosenfeld (USA): Endocrine disruptor effects on the gut microbiome
Larissa Takser (Canada): Three environmental perturbations, one disorder : endocrine disruption, one-carbon metabolism and maternal gut microbiome during gestation give rise to an autistic-like phenotype in wild type rat offspring
Margaret Karagas (USA): *In utero* and early life arsenic exposure, immunity and the microbiome: results from the New Hampshire Birth Cohort Study

10:30-11:00 Refreshment break

11:00-12:30 *Session VI:* Metabolic disturbances
Chairs: Andreas Kortenkamp (UK) and TBC
Johannes Beckers (Germany): Epigenetic transmittance of obesity risk
Michael Ross (USA): *In vivo* and *In vitro* BPA exposure effects on adiposity and appetite
Pal Weihe (Faroe Islands): Early-Life exposures to persistent organic pollutants in relation to overweight in preschool children
Shohreh Farzan (USA): Adverse maternal and infant cardiometabolic health outcomes in relation to prenatal arsenic exposure: Findings from the New Hampshire birth cohort

12:30-14:00 Lunch and posters

14:00-16:00 *Session VII:* Neurobehavioral deficits
Chairs: Philippe Grandjean (Denmark) and TBC
David Bellinger (USA): Neurotoxic risk from use of general anesthesia in children
Cecile Chevrier (France): Occupational exposure to organic solvents during pregnancy and child behavioral disorders
Dave Saint-Amour (Canada): Interactions between mercury and selenium compounds as revealed by visual evoked potential responses in a cohort of Inuit children
Gro Villanger (Norway): Prenatal exposure to neurotoxic metals and ADHD symptoms and cognitive functions in preschool children

Shu Li Wang (Taiwan): Phthalate exposure and attention deficit hyperactivity disorder traits in children's temperament: A 12-year follow-up study of a Taiwanese birth cohort
Youssef Oulhote (USA): Prenatal exposure to PBDEs and predisposition to frustration at 7 months: Results from the MIREC Study
Yoko Nomura (USA): Fetal programming on infant temperament and neurodevelopment among mothers experienced a natural disaster in pregnancy: Children of Superstorm Sandy

16:00-16:30 Refreshment break

16:30-18:00 *Seesion VIII:* Immune dysfunction and inflammation
Chairs: Margaret Karagas (USA) and TBC
Rosalind Wright (USA): Developmental stresses as a trigger of asthma and allergy
Kari Nadeau (USA): Impact of air pollution on immune functions
Jueun Lee (Korea): Impact of particulate matter exposure on atopic dermatitis in children
Yasuhiro Yoshida (Japan): LPS-rich urban particulate matter 10 suppresses immune responses in splenocytes while particulate matter itself activates NF-κB

10:30-11:00 *Nurturing Program for Children's Environmental Health Researchers (4)*
Chair: Hiroshi Nitta (Japan)
Ulla Birgitte Vogel (Denmark): Developmental toxicity following prenatal exposure to engineered and process-generated nanoparticles

12:30-14:00 *NIMD Mercury Session:* Exposure assessment and health effects
Chairs: Irina Zastenskaya (WHO-Euro) and Mineshi Sakamoto (Japan)
Mineshi Sakamoto (Japan): Mercury, selenium, docosahexaenoic acid, and vitamin E profiles in maternal and cord blood
Nozomi Tatsuta (Japan): Birth weight of male infants is susceptible to prenatal exposure to methylmercury – Tohoku Study of Child Development
Irina Zastenskaya (WHO-Euro): Critical points in the planning of a global approach to monitor human exposure to mercury and its compounds

18:00-21:00 *NIEHS Brainstorming Session*: Asian Network for DOHaD
【by invitation only】
Organized by Jerrold Heindel (USA) and Toshihiro Kawamoto (Japan)

Wednesday, 16 November

9:00-10:30 Session IX: Reproductive system
Chairs: Sharon Munn (Italy) and Eiji Shibata (Japan)
Ulrike Ludere (USA): Vulnerability of the ovary to developmental toxicant exposures
Tina K Jensen (Denmark): Clinical markers of developmental reproductive toxicity
Atsuko Araki (Japan): Prenatal exposure to organochlorine pesticides and steroid hormones profiles in fetal blood: The Hokkaido Study.
Mei-Lien Chen (Taiwan): Prenatal NP and BPA exposures, inflammation, and birth outcomes: A prospective birth cohort study in Taiwan

10:30-11:00 Refreshment break

11:00-12:30 Session X: Complex exposures

Chairs: Mineshi Sakamoto (Japan) and TBC

Erik Melen (Sweden): Epigenetics impacts of air pollution components
Jed Friedman (USA): Impact of maternal diet components on tissue-specific development
Remy Slama (France): Statistical approaches to relate the exposome to human health

12:30-14:00 Lunch and posters

14:00-16:00 Session XI: Lessons from prospective birth cohorts
Chairs: Pau-chung Chen (Taiwan) and Irina Zastenskaya (WHO-EURO)
Martine Vrijheid (Spain): Lessons learned in cross-cohort collaborations in the EU
Eun-hee Ha (Korea): Lessons learned from launching Korean Children's Environmental Health Study
Philippe Grandjean (Denmark): Measured and estimated PFAS exposures in regard to serum vaccine antibody concentrations
Sharon Ng (Singapore): In utero cotinine exposure and persistent short stature in children: results from a multi-ethnic Asian cohort study after 3 years of follow-up
Yu-min Lee (Korea): Prenatal BPA exposure affect fetal growth and birth outcome in different manners depending on period with infant sex and GST polymorphisms.
Manik Kadawathagedara (France): Maternal exposure to mixtures of food chemicals in relation with offspring birthweight and postnatal growth

16:00-16:15 Break

16:15-17:00 *Closing Session:* The DOHaD paradigm in environmental health research and public health
Chairs: Toshihiro Kawamoto (Japan) and Jerry Heindel (USA)
Thaddeus Schug (USA): Research and collaboration potentials
Claudia Stein (WHO-EURO): The significance of DOHaD for public health
Philippe Grandjean (Denmark): Conference conclusions and outlook
Toshihiro Kawamoto (Japan): Closing of the conference

9:30-11:30 *PPToxV and the 18th International Symposium of Society for Aldh2 Knockout Mouse Research joint symposium*

Chairs: Manabu Muto (Japan) and Toyohi Isse (Japan)
Mostofa Jamal (Japan): Ethanol and acetaldehyde decrease extracellular glutamate in Aldh2-knockout mouse brain: a reverse microdialysis study
Toru Hosoi (Japan): Behavioral analysis of ALDH2 deficient mice
Takuto Tsuchiya (Japan): Disruption of aldehyde dehydrogenase 2 gene results in altered cortical bone structure and increased cortical bone mineral density in the femoral diaphysis of mice
Akiko Matsumoto (Japan): Significance of defective polymorphism of aldehyde dehydrogenase 2 gene (*ALDH2*) in prenatal toxicology
Yong-Dae Kim (Korea): Exome-wide association study identifies aldehyde dehydrogenase 2 genetic polymorphism associated with blood lead level in Korean general population

Manabu Muto (Japan): Alcohol-related esophageal squamous cell carcinogenesis in patients with ALDH2 gene alterations and fields effects

12:30-14:00 ***PPToxV and JPAS(Japan Plastic Allergy Society)joint symposium : The Latest Study of Toxicology, Cancer and Allergy Epidemiology***

Chairs: Christoph Vogel (USA) and Megumi Yamamoto (Japan)

Hsu-Sheng Yu (Taiwan): The association of food allergy with patients of atopic dermatitis in Taiwan

Christoph Vogel (USA): Role of the aryl hydrocarbon receptor (AhR) and its repressor in inflammation

Yasuhiro Ishihara (Japan): Role of astrogliosis elicited by methylmercury in neuroprotection

Jong Park (USA): Hyper-methylated genes associated with recurrence of prostate cancer