Conference Program: "Assessing and Mitigating Environmental Exposures in Early Life".

Sunday 15 <sup>th</sup>	Sunday 15th September 2019 Venue; Kyoto College of Medical Sciences		
0945-1000	Pre-conference Training Workshop; Registration		
1000-1300	Integrated Environment Health Impact and Risk Assessment	Children's Environmental Health	
	<ul> <li>Paul Jagals, University of Queensland</li> <li>Colleen Lau, Australian National University</li> <li>David Roser, University of New South Wales</li> </ul>	<ul> <li>Peter Sly, The University of Queensland: Vulnerability of Children to environmental exposures.</li> <li>David Carpenter, The University at Albany: Environmental contributions to neurodevelopmental disorders in children.</li> <li>Stephania Cormier, Louisiana State University: Air pollution and Children's Health</li> <li>Antonio Pascale, University of the Republic: Impacts of pesticide exposure in childhood.</li> </ul>	
1300-1500	Lunch Barbecue including Taiko Drum performance	exposure in Chitanood.	
1500-1800	Intellectual Property Rights Management through Patents	Birth Cohorts in the Asian Pacific Region (meeting by invitation)	
	Rajendra Prasad, Merit India Consultants	Shoji F. Nakayama, National Institute of Environmental Studies; Japan's challenge of national birth cohort.	

#### **Pre-conference training workshops**

- 1. *Children's Environmental Health:* In general, children receive a higher "dose" of toxicants in a given environment, are less able to neutralize toxicants and live long enough for diseases with long latency periods to manifest. This workshop will cover the principles underlying the vulnerability of children and will highlight risks in specific environments. This workshop is part of a series organised by staff from the Network of WHO Collaborating Centres for Children's Environmental Health at previous PBC conferences. This workshop provides an opportunity for engagement of a wider audience and additional training with evaluation materials made available to trainees.
- 2. Integrated Environmental Health Impact and Risk Assessment: To enhance understanding of impact assessment and management based on multiple environmental exposures, it is necessary to understand the integrative impact assessment process. This workshop will discuss how environmental exposures are best assessed within an Integrated Environmental Health Impact Assessment process using "real-world" data from the Pacific Islands. This workshop is part of a series organised by staff from the Network of WHO Collaborating Centres for Children's Environmental Health at previous PBC conferences. This workshop provides an opportunity for engagement of a wider audience and additional training with evaluation materials made available to trainees.
- 3. Intellectual Property Rights Management through Patents: IPR stands for Intellectual Property Rights which include patents, copyright, trademarks, etc. This workshop will deal mainly with patent. Patents is a subject area which is important for scientists and technologists and this is an area in which lawyers can do little without having a scientific background and/or collaborating with scientists of relevant fields to provide information on the technical aspects of a patent application. Most technology-based businesses compete with their rivals based on the patents they hold. Scientists working in applied research fields need an understanding of patents and how to search for them to understand what has already been patented in their field of interest. This workshop will provide attendees with the basic skills required for performing patent searches and will provide hand-on experience.

Monday 16 <sup>h</sup>	September 2019 Venue; Kyoto Kyoiku-Bunka Center		
Registration:	Room 103		
0900-0930	Opening ceremony Peter D Sly, Chair, PBC Board of Directors; Fujio Opening address: Dr Kosuke Sasaki. Ministry of Environment, Japan: environmental exposures		
0930-1000	Ikebana flower arrangement performed by Kikuko Nakaji, Supreme Adviser of Ikenobo Kyoto		
1000-1200	<ul> <li>Plenary 1: Longitudinal Birth Cohorts in the Asia-Pacific region; Hall Room</li> <li>Chairs: Fujio Kayama, TBA</li> <li>Speakers:</li> <li>▶ 10:00-10:40. The Japan Environment and Children's Study (JECS). Michihiro Kamijima</li> <li>▶ 10:40-11:20. Current status and Future of national birth cohort of Korea: Korean Children's Environmental Health Study(KOCHENS)" Eun Hee Ha, South Korea</li> <li>▶ 11:20-12:00. The ORIGINS project: An intervention birth cohort to restore global health. Desiree Silva, Perth</li> </ul>		
1200-1300	Lunch		
1300-1500	Symposium 1: What is new in air pollution? Chairs: Paul Jagals, Priyanka Agarwal; Hall Room	Birth cohort round table: Assessing environmental exposures in birth cohorts:	
	<ul> <li>Speakers:         <ul> <li>13:00-13:30. Environmentally persistent free radicals: the missing link between air pollution and chronic disease. Stephania Cormier, LSU</li> <li>13:30-14:00. Hourly association between ambient suspended particulate matter and human health. Vera Ling Hui, Kyoto University</li> <li>14:00-14:30. The National Clean Air Program: A flagship program of the Indian Government to combat air pollution across India. TK Joshi, India</li> </ul> </li> <li>Speaker from abstracts         <ul> <li>14:30-15:00. PM2.5 collected by cyclone technique causes stronger biological responses than that by filter. Akiko Honda.</li> </ul> </li> </ul>	Chairs: Kazuko Ohno, Randy Novirsa; Room 101  Panellists:      Peter Sly, Australia     Eun Hee Ha, Korea     Michihiro Kamijima, Japan     Chisato Mori, Japan     Desiree Silva, Australia  Topics:      Data harmonization and sharing amongst birth cohorts     Biomonitoring and biomarkers in birth cohorts     Training and mentorship: learning from each other     Sustainability and funding in birth cohorts     Translating findings to policy and practice	
1500-1530	Kyoto University, Japan.  Tea Break: Room 103	<u>l</u>	

1530-1800	Symposium 2: Room 101	Symposium 3: No Data to Big Data: Data sharing, integrating and	
	Environmental and occupational contributions to cancer Hall Room	modelling for Environmental Health Information and Decision Making;	
	Chairs: Takemi Otsuki, Anand Madhu	Room 301 Chairs: Michelle Heacock, Paul Jagals Speakers:	
	Speakers:		
	➤ 15:30-16:00. Cholangiocarcinoma among offset printing workers in		
	Japan: Shinji Kumagai	➤ 15:30-15:45. Introductory remarks. Michelle Heacock, NIEHS, USA	
	➤ 16:00-16:30. Environmental and occupational asbestos exposure	> 15:45-16:15.Information Systems for Integrated Environmental Health	
	and malignant mesothelioma: Takemi Otsuki	Management. Paul Jagals, UQ, Australia.	
	Speakers from abstracts	➤ 16:15-16:45. Data requirements for Precision Environmental Health:	
	➤ 16:30-17:00. Immunological screening devices for patients with	Decision Support for Infectious Disease Control in the Pacific Islands.	
	malignant mesothelioma as well as people exposure to asbestos.	Colleen Lau, Australian National University, Canberra, Australia.	
	Yasumitsu Nishimura	➤ 16:45-17:15. Data integration for risk assessment. David Roser,	
	> 17:00-17:30. Radiation effects on immune and inflammatory markers	University of New South Wales, Australia.	
	among atomic bomb survivors. Tomonori Hayashi	> 17:15-18:00. General discussion.	
	> 17:30-18:00. Lessons Learned on Public Health From The		
	Fukushima Daiichi Nuclear Power Plant Accident. Naoki Kunugita		
1800-2000	Welcome party; Room 103		

Tuesday 17 <sup>t</sup>	Tuesday 17th September 2019 Venue; Kyoto Kyoiku-Bunka Center		
0800-0830	Registration; Room 103		
0830-1000	Plenary 2: Pollution and Health: beyond the Lancet Commission; Hall Room		
	Chairs: Mathuros Ruchirawat, CRI, Avesh Kumar		
	Speakers:		
	<ul> <li>08:30-09:00. Pollution and Health: Update from the Commissioners. Peter Sly, UQ</li> <li>09:00-09:30. Pollution and Health in Japan. Hirohisa Takano Kyoto University</li> </ul>		
	> 09:30-10:00. Pollution and Health: the funder's perspective. Will	iam Suk, NIEHS	
1000-1030	Tea break; Room 103		
1030-1200	Symposium 4: Persistent Organic Pollutants (PCB, dioxins); Hall	Symposium 5: Hazardous waste remediation; Room 101	
	Room	Chairs: Velayuthan Murugesan, Randy Novirsa	
	Chairs: David Carpenter, Igor Hadjamberdiev	Speakers:	
	Speakers:	> 10:30-10:50. Batch to pilot plant approach for the development of	
	> 10:30-11:05. POP exposure in early life: Aimin Chen	defluoridation water treatment technology for field applications. Tahir	
	> 11:05–11:40. Trans-placental exposure of PCBs and heavy	Rafique	
	metals alters DNA methylation status in human umbilical cord.	> 10:50-11:10. Harnessing Solar Energy by 2D Nanomaterials for the	
	Chisato Mori, Japan	Degradation of Hazardous Organic wastes. Rengaraj Selvaraj:	
	Speakers from abstracts	> 11:10-11:30. Indirect photolytic decomposition of trace organic	
	➤ 11:40-12:00. The toxicity evaluation and treatment alternatives	contaminants in conventionally treated wastewater. Bob Arnold,	
	of river water receiving industrial wastes in Citarum River	> 11:30-11:50. The Pure Earth program in site remediation after hazardous	
	tributary, West Java Indonesia Indah Salami. Institut teknologi	waste contamination. Drew McCantor	
	Bandung, Indonesia.	Speaker from abstracts	
		► 11:50-12:00. Recent Developments in Conversion of Hazardous Category	
		Industrial Wastes into Reusable Material and Improved Secured Land Fill.	
1200 1200	I I D 102	SG Rajamani.	
1200-1300	Lunch, Room 103		

1300-1500	Symposium 6: Disaster Response Research; Hall Room	Symposium 7: Arsenic and Metals; Room 101
	Chairs: Shoji F. Nakayama, National Institute for Environmental Studies,	Chairs: Kyoung Woong Kim, Gwangju Institute of Science &
	Japan, Phan Dinh Quang.	Technology, Young-Gwang Kim
	Speakers:	Speakers:
	➤ 13:00-13:30. Public health response to disasters in Japan. Yasuhiro	> 13:00-13:30 Intelligent passive treatment learnt from natural
	Kanatani, National Institute of Public Health,	attenuation of mine waste water. Tsutomu Sato, Hokkaido
	➤ 13:30-13:50. Improving disaster response efforts to better understand	University (Japan)
	human health impacts: experiences from the USA. Richard Kwak,	➤ 13:30-14:00. Early-life exposure to arsenic and adulthood deaths.
	National Institute of Environmental Health Sciences, USA.	Mahfuzar Rahman, Research and Evaluation Division, BRAC
	➤ 13:50-14:10. Disaster Research Response in Canada. Tom Kosatsky	Speakers from abstracts
	National Collaborating Centre for Environmental Health (NCCEH)	➤ 14:00-14:30. Human health risk assessment of heavy metals via
	> 14:10-14:30. Fire fighters health: Wildfire response. Tippawan	consumption of fish from Kao bay. Hasnawati Amqam. Universitas
	Prapamontol, Chiang Mai University,	Hasanuddin.
	> 14:30-15:00. Extreme events, disasters, and health impacts in	> 14:20-15:00 Ecological management of mercury products and
	Indonesia. Budi Haryanto, University of Indonesia	wastes. Mumtaz Hussain, Society for Conservation of Environment
		and Sustainable Development, Pakistan.
1500-1530	<b>Tea b</b> reak	

## 1530-1730

# Poster Session; Room 103

### **Chair: Brittany Trottier**

- A-1 Environmental measurements in the Sub-Cohort Study of the Japan Environment and Children's Study Yukiko Nishihama
- A-2 Variation in men's dietary intake between occupations, based on data from the Japan Environment and Children's Study. *Rie, Tanaka*
- A-3 Analysis of s-phenylmercapturic acid (S-PMA) as benzene biomarker and red blood cell count in show workers in Sukajaya Village, Indonesia. *Ranti Ekasari*.
- A-4 Pesticides Pollution and Child Health in Central Asia. *Igor Hadjamberdiev*
- A-5 Health Effect of The Fine Dust Based on Chemical Analysis from Various Sources in Korea. *Injeong Kim*
- A-6 Measurement of Hazardous Chemicals in the Mainstream Aerosol of Heated Tobacco Products. Naoki Kunugita
- A-7 Household air pollution: existing situations and action needed in Viet Nam. Le Thai Ha.
- A-8 Children's screening-level exposure evaluation os ASEAN-specific ambient PM<sub>2.5</sub> pollution" policy perspectives on risk reduction. *Ellis, Wongsearaya*
- A-9 NGO Three Percent Earth Foundation. Ellis, Wongsearaya
- A-10 Chemical Constituent of Atmospheric Particles and its Light Extinction Coefficients over Urban Region. Atar Singh Pipal
- A-11 Estimated of Risk Quotient of Benzene Around School. Studied at the Smpn 16, Bandung, Indonesia. Ema Hermawati
- A-12 Tunable Efficiency of Photocatalyst in Water and Environmental Purification. Avesh Kumar
- A-13 A Study on The Distribution And Bioaccumulation of Microplastic on The Seawater In The Southern Open Sea Area Of Korea. *Huihi Jeon*
- A-14 Activation of MIP-2 and MCP-5 expression in methymercury-exposured mice and their suppression by N-Acetyl-L-Cysteine. *Muflihatul Muniroh*.
- A-15 Genetic and epigenetic alterations among residents to industrial waste Incinerators. *Mihi Yang*.
- A-16 Sustainable Management of Wastes into Wealth as Valuable Organic Manure through Vermicomposting. *Rajamani Raman*.
- A-17 Effects of selenite on uptake of arsenite in rat erythrocytes. Yayoi, Kobayashi
- A-18 Association between exposure to bisphenols and wheeze in 7-years old children Hokkaido study. Yu Ait Bamai

### Poster Session; Room Poster session; Room 202

#### **Chair: Michelle Heacock**

- B-1 Polycyclic Aromatic Hydrocarbons Exposure and Pregnancy Outcomes. *Priyanka Argarwal*
- B-2 Burden of Pollutants in Placenta Tissue and Preterm Birth. *Ajay Taneja*
- B-3 Partial Nested Approach of Multilevel Analysis of Symptoms after Exposure Opened By Japan Poison Information Center. *Toshiko Sawaguchi*
- B- 4 Arima Approach of Multilevel Analysis of Symptoms after Exposure Opened by Japan Poison Information Center. *Toshiko Sawaguchi*
- B-5 Current States of Minamata Bay via Marine Environmental Aspects. Akito Matsuyama
- B-6 Mercury Atmospheric Dry Deposition and Inhalation Rate of Gold Miners in Artisanal Buladu Gold Mine, Indonesia. *Anwar Mallongi*
- B-7 Contribution of House Dust Contamination towards Lead Exposure among Children in Karachi, Pakistan. Akihiko Ikegami
- B-8 Seasonal Pattern of Air Pollution Effect on Mortality in Japan. Satbyul Estella Kim
- B-9 Folic Acid Ingestion in Japanese Pregnant Women. *Nathan Mise*
- B-10 Earthworm Bioaccumulation of Cesium and Cobalt Emphasis on their Transport and Fate in Soils. Byung-Tae Lee
- B-11 Health-Related Factors Reported after the Great East Japan Earthquake. Akiko Eto
- B-12 Natural Disasters Causes Impacts and Management Strategies. *Mumtaz Hussain*
- B-13 The Relationship of Mercury Exposure with Neurology Problems in Artisanal Gold in Makassar City. Reni Suhelmi
- B-14 Chromium-mediated hyperpigmentation of skin in male tannery workers in Bangladesh. *Al Hossian*.
- B-15 Exposure assessment of organophosphorous pesticides on 42-month-old children in northern parts of Japan. *Kairn Nomasa*.
- B-16 Synchrotron radiation X-ray fluorescence analysis (SR-XRF) of heavy metal accumulation in deciduous teeth. *Kahoko Yasumitsu-Lovell*.
- B-17 Verbal abuse during pregnancy increases frequency of newborn hearing screening referral: The Japan Environment and Children's Study. *Kaori Komori*.
- B-18 Exposure levels and health implications of particle bound metals at "World Heritage Site", Agra, India. *Himanshi Rohra*.
- B-19 Asphyxia neonatorum of neonates weight base on gestational age in Mother and Child Hospital, Budi Kemuliaan, Jakarta. *Rahmatillah Razak*.
- B-20 Risk of mercury exposure during childhood: a review of Sri Lankan situation. HKA Galappatthi.
- B-21 Radiation protection and health of personnel of contractors enterprises, which participated in works for construction new safe confinement of object "shelter" of SSE Chernobyl NPP. *Viktor Sushko*.
- B-22 Changes over 1999 to 2018 in awareness among female students attending the K College of Nursing regarding waste reduction and dioxin issues in Japan. *Keichi Tanno*.
- B-23 Glimpse of hidden heat health issues among Sri Lankan children. *HKA Galappatthi*.

• B-24	Lead contamination of a mining and smelting district in Kosovo. Lunchakorn Prathumratana.
• B-25	Remediation of mercury contaminated materials and soils around the mercury thermometer factory. S Rajamani.
• B-26	Intestinal colonization of antibiotic resistant bacteria in humans with chronic exposure to arsenic in rural Bangladesh. <i>Muhammad Asaduzzaman</i> .
• B-27	Risk analysis of residence environmental factors toward the possibility of Tuberculosis transmission in Bandung. <i>Katharina Origawati</i> .
• B-28	Development of disinfectant for Legionella and amoeba. Akihiro Kondo
• B-29	Development of Phage Genome Assembly System using Yeast. Moriyuki Kawauchi
• B-30	Biogeochemical Influence on Horse Health at Hustai National Park in Mongolia. Young-Gwang Kim
• B-31	Maternal environmental exposure to organochlorine pesticides and risk of pre-term birth. Madhu Anand.
• B-32	PCBs in major food samples and health risk in Bangladeshi children. Rehnuma Haque.
• B-33	Urinary 2-napthol as a proper exposure biomarker for PM <sub>2.5</sub> exposure. <i>Jiwoo Seo</i>
• B-34	Indoor air pollution and early life exposure in Sri Lanka: a review of existing studies. HKA GHalappatthi.
• B-35	Hazardous wastes nature implications and environmental remediation. Muntaz Hussain
• B-36	Possible estimation of methylmercury concentration in the muscle by total mercury concentration in the gill in marbled rockfish. <i>Kimiko Izumo</i>
• B-37	Chronic Effect Analysis of Mercury Exposure on Communities around Small-Scale Gold Mining in Indonesia Using Human Biomonitoring Method. <i>Herto Dwi,Ariesyady</i>
• B-38	Remediation of heavy metals in an abandoned mine drainage, Akita prefecture, Japan. Frances Chikanda
• B-39	Awareness raising on health and environmental health impact of high density polyethylene plastic bags, Kyaukpadaung market, Myanmar. Wai Phyo Aung

	Wednesday 18th September 2019 Venue; Kyoto Kyoiku-Bunka Center		
0800-0830	Registration; Room 103		
0830-1010	Plenary 3: Post-disaster Ionizing Radiation Exposures; Hall Room		
	Chairs: Ryuji Okazaki, Professor, University of Occupational and Environmental Health, Japan, Kazuko Ohno, Japan		
	Speakers:		
	➤ 08:30-09:10 Health Effects in Critical Groups of Exposed After the Chernobyl Accident. Victor Sushko, Deputy Director, Research Cer Radiation Medicine Ukraine;		
	> 09:10-9:40 Post-crisis Recovery from the Fukushima Nuclear Power Plant Accident: Different Risk of Thyroid Cancer in con		
	Chernobyl. Shunichi Yamashita, Vice president, Nagasaki University		
	> 09:40-10:10 The Fukushima Daiichi nuclear power plant accident: What do the affected animals teach us?: Dr. Manabu Fukumoto, Pro		
	Tokyo Medical University		
1010-1030	Tea Break; Room 103		
1030-1230	Symposium 8: Network of WHO Collaborating Centres and programs in	Symposium 9: Risk Communications about radiation; Room 301	
	the Western Pacific; Hall Room	Chairs: Kazuko Ohno, Tomonori Hayashi	
	Chairs: Noor Jehan, Chisato Kataoka		
	Speakers:	Speakers:	
	> 10:30-10:55. WHO programs in the Western Pacific. Paul Jagals, WHO	> 10:30-11:00. Lessons from Fukushima: Public Health Nurses'	
	Collaborating Centre, Brisbane, Australia.	dialogue with affected peoples. Kiyomi Asahara	
	> 10:55-11:20. The 4 big Environmental Health Challenges for Pacific	> 11:00-12:20. Case Study. Kiyomi Asahara, Emiko Konishi	
	Island Countries. Paul Jagals, WHO Collaborating Centre, Brisbane, Australia.	> 12:20-12:30. Conclusion. Emiko Konishi	
	> 11:20-11:45. Environmental exposure to drugs of abuse in early		
	childhood: a clinical perspective from a poison control centre. Antonio		
	Pascale, WHO Collaborating Centre, Montevideo, Uruguay.		
	> 11:45-12:10. Multilevel Analysis of Symptoms after Exposure Opened		
	By Japan Poison Information Center. Toshiko Sawaguchi, Tokyo		
	University of Social Welfare, Japan.		
	➤ 12:10-12:30. Capacity building and increasing awareness on		
	environmental chemical exposures and prevention of their hazards.		
	Atsuko Araki, WHO Collaborating Centre, Hokaido, Japan.		
1230-1330	Lunch, Room 103; Board of Directors Meeting, Room 204		

1330-1530	Symposium 10: Mercury, Arsenic and Heavy metals: Hall Room		
1330-1330	> Chairs: Lizbeth Lopez-Carrillo , Mahmood Khwaja		
	Speakers:		
	> 13:30-13:55. Mercury contamination in health care settings. Mahmood Khwaja. Sustainable Development Policy Institute, Islamabad, Pakistan.		
	> 13:55-14:20. Microbiological in situ stabilization of As and heavy metals in soil by indigenous sulfate reducing bacteria, Prof. Jong-Un L Chonnam National University (Korea).		
	➤ 14:20-14:45. Arsenic and heavy metal contamination in rice from the SE Asian countries, Prof. Kyoung-Woong Kim, GIST (Korea)		
	> 14:45-15:10 Inorganic arsenic methylation capacity and breast cancer by immunohistochemical subtypes in northern Mexican women. Lizbeth		
	Lopez-Carrillo.		
	Speakers from abstracts		
	> 15:10-15:30. Arsenic removal by cryogels containing arsenic-adsorptive fine particles. Koichiro Shinomori.		
1530-1545	Tea Break; Room 103		
1545-1715	5 Student presentation session; Hall Room		
	Chairs: Brittany Trottier, Peter Sly		
	Speakers:		
	> 15:45-16:00. Long-term Exposure of Mercury in Rice and Typical Symptoms among Residents in Artisanal Small Scale Gold Mining Area,		
	Lebaksitu, Indonesia. Randy Novirsa. Graduate School of Environmental and Symbiotic Sciences, Prefectural University of Kumamoto, Japan.		
	> 16:00-16:15. The distribution of total mercury in cigarette in sale collected from East Asia and Europe countries. Quang Phan Dinh. Gradua school of Environmental & Symbiotic Sciences, Prefectural University of Kumamoto, Japan.		
	> 16:15-16:30. Preliminary study of Arsenic and Cadmium contamination in paddy soil and rice in the vicinity of Nui Phao mine, Vietnam. Ha Ti		
	Nguyen. School of Earth Sciences and Environmental Engineering, Gwangju Institute of Science and Technology, Gwangju, Republic of Kore		
	> 16:30-16:45. Dose disruption of gut microbiota by silver nanocolloid cause bacterial infection: a case study using the Medaka model. Chisato		
	Kataoka. Research Fellow of Japan Society for the Promotion of Science, National Institute for Minamata Disease.		
	> 16:45-17:00. Body burden of organochlorine pesticides as a risk factor for breast cancer. Madhu Anand. Ambedkar University, Agra, India.		
	> 17:00-17:15. Lead exposure among pregnant women, new-borns and children. Zafar Fatmi. (Presented by Prof Fujio Kayama) Department of		
	Community Health Sciences, Aga Khan University & Jichi Medical University, Japan.		
1715-1800	Student-Faculty networking session; Room 103		

Thursday 19	oth September 2019 Venue; Kyoto Kyoiku-Bunka Center	
0800-0830	Registration; Room 103	
0830-1000	Plenary 4: Environmental Impact of Mercury contamination; Hall Room	
	Chairs: Masaaki Nakamura, National Institute of Minamata Disease, Niladri Basu	
	> 08:30-09:00. Exposure assessment of methylmercury among Vietnamese in Hanoi. Megumi Yamamoto. National Institute of Minamata Disease, Japan	
	> 09:00-09:30. Inorganic mercury as a negative confounder of the effects of methyl mercury on maternal and infant health outcomes. Ellen M. Wells (School of Health Sciences, Purdue University, USA	
	> 09:30-10:00. Systematic Review of Mercury Exposures Worldwide. Findings from the 2018 WHO and UN Global Mercury Assessment. Niladri Basu. McGill University, Montreal, Canada	
1000-1030	·	
1030-1130 Plenary 4: Environmental Impact of Mercury contamination; Hall Room (continued)		
	Chairs: Megumi Yamamoto, National Institute of Minamata Disease, Ellen M. Wells.	
	> 10:30-11:00 Cross sectional study on MeHg exposure and health survey in Kinan region, Japan. Masaaki Nakamura. National Institute of	
	Minamata Disease, Japan	
	> 11:00-11:30. Brain methylmercury uptake in fetal, neonate, weanling, and adult rats as risks at different life stages. Mineshi Sakamoto. National	
	Institute of Minamata Disease, Japan	
1130-1300	Plenary 5: Environmental Impacts on Infectious Disease, global warming and antibiotic resistant microorganisms Hall Room	
	Chairs: William Suk, NIEHS, Brittany Trottier, NIEHS	
	Speakers:	
	> 11:30-12:00. Environmental impacts on immune system development. Peter Sly, University of Queensland, Australia.	
	> 1200-1230. Changing patterns of infectious diseases. Colleen Lau, Australian National University, Australia.	
	➤ 1230-13:00. Measurement of antimicrobial resistance in the environment using an integrated surveillance protocol. Ricardo Soares Magalhaes. University of Queensland, Australia.	
1300-1330	Closing Ceremony and Awards; Hall Room	
1400-1700	Field Trip	