

**US–Japan Cooperative Medical Science Program
45th Annual Joint Panel Meeting on
Cholera and Other Bacterial Enteric Infections Panel**

Meeting Agenda

Sunday, December 5

16:00 – 19:00 **Registration** at Kyoto Royal Hotel & Spa

Monday, December 6 (Day 1)

9:00 – 9:30 **Registration** at Inamori Foundation Memorial Building, Center for Southeast Asian Studies, Kyoto University
Poster session 1: Set-up

9:30 – 9:40 **Opening remarks**
John D. Clemens & Mitsuaki Nishibuchi

Oral session 1: Epidemiology & Diagnosis
Co-chairs: John D. Clemens & Mitsuaki Nishibuchi

9:40 – 10:05 Evolution of the 7th pandemic *Vibrio cholerae* based on genome wide single nucleotide polymorphisms and multilocus variable number tandem repeats analysis
Connie Lam, Sophie Octavia, Peter Reeves, Lei Wang, Ruiting Lan

10:05 – 10:30 Prototype El Tor displaces classical and variant El Tor from endemic cholera in Mexico, 1991 – 2008
Munirul Alam, Shah Manjur Rashed, M. Leonardo Lizarraga-Partida, Gabriela Delgado, Rosario Morales, Jose Luis Mendez, Haruo Watanabe, Makoto Ohnishi, G.Balakrish Nair and Alejandro Cravioto

10:30 – 10:55 O:K serotype of *Vibrio parahaemolyticus*: a very important epidemiological marker
Koji Seo, Fumio Gondaira, Junichi Sugiyama, Pharanai Sukhumungoon, Varaporn Vuddhakul, Wataru Yamazaki, Kazuko Seto, Yoshito Iwade, Rika Shimizu, Natsuko Tanaka, Yoshitsugu Nakaguchi, Mitsuaki Nishibuchi

10:55 – 11:20 Coffee break

11:20 – 11:45 Screening for live food pathogens in a 25 g of food sample with combination of nonselective enrichment culture and multiplex PCR
Masahiro Hayashi, Sayoko Kubota-Hayashi, Asami Mori, Takuya Mizuno, Keiko Kawamoto, Kiyofumi Ohkusu, Hisao Kurazono, Souichi Makino and Takayuki Ezaki

Oral session 2: Vaccine and Prevention
Co-chairs: Shelley M. Payne & Haruo Watanabe

11:45 – 12:10 Old wine in a new bottle: killed oral cholera vaccines
John D. Clemens

12:10 – 12:35 Transcutaneous immunization with Vi and Vi-DT conjugate typhoid vaccines
Md. Saruar Bhuiyan, Anuj Kalsy, Richelle Charles, Md. Arifuzzaman, John D. Clemens, Regina C. LaRocque, Jason B. Harris, Stephen B. Calderwood, Cecil Czerkinsky, Firdausi Qadri, Edward T. Ryan

- 12:35 – 13:00 Immune response to oral cholera vaccine in children in an arsenic contaminated area in Bangladesh
Mohiul I. Chowdhury, Amit Saha, Tanvir Ahmed, Samar Kumar Hore, Mohammad Murshid Alam, Ann-Mari Svenerholm, Firdausi Qadri
- 13:00 – 14:30 Lunch break
- 14:30 – 14:55 Development of an effective treatment for the reduction of *Campylobacter jejuni* on chicken carcasses
Naoaki Misawa, Taisuke Shinki, Satomi Sasaki, Seigo Yamamoto, Takako Taniguchi, Wataru Yamazaki
- Oral session 3: Immunology**
Co-chairs: Jan M. Agosti & Masatoshi Noda
- 14:55 – 15:20 Gut associated immunological responses in patients with cholera
Taher Uddin, Jason B Harris, Taufiqur R Bhuiyan, Tahmina Shirin, Muhammad Ikhtear Uddin, Ashrafal Islam Khan, Fahima Chowdhury, Regina C. LaRocque, Nur Haque Alam, Edward T Ryan, Stephen B Calderwood, Firdausi Qadri
- 15:20 – 15:45 LPLUNC1 modulates innate immune response to *V. cholerae* infection
Ok S. Shin, Taher Uddin, Taufiq Bhuiyan, Robert Citorik, Jennifer Wang, Robert Finberg, Edward T. Ryan, Stephen Calderwood, Firdausi Qadri, Regina C. LaRocque, and Jason B. Harris
- 15:45 – 16:10 Novel *Salmonella* effectors capable of activating caspase-8 in macrophages
Akiko Takaya, Yoshiharu Satoh, Tomoko Yamamoto
- 16:10 – 17:10 **Poster session 1: Introduction** (short oral presentations of selected posters)
Presenters to be announced
- 17:10 – 18:10 **Poster session 1: Discussion**
Coffee break
- 18:10 – 18:40 **Poster session 1: Removal**
- 18:40 – 19:00 Move to a reception venue
- 19:00 – 21:00 **Welcome reception:** all participants are invited.

Tuesday, December 7 (Day 2)

- 9:00 – 9:30 **Registration** at Inamori Foundation Memorial Building, Center for Southeast Asian Studies, Kyoto University
Poster session 2: Set-up
- Oral session 4: Pathogenicity I**
Co-chairs: Dennis J. Kopecko & Takayuki Ezaki
- 9:30 – 9:55 Cholera in Zanzibar, Africa: Evidence for the emergence of High Cholera Toxin Producing El Tor variant *Vibrio cholerae*
A. Naha, G. Chowdhury, J. Ghosh-Banerjee, M. Senoh, T. Takahashi, B.N. Ley, K. Thriemer, J. Deen, L. Seidlein, S. M. Ali, A. Khatib, T. Ramamurthy, R.K. Nandy, G.B. Nair, Y. Takeda and A.K. Mukhopadhyay
- 9:55 – 10:20 Entner Doudoroff pathway is functional in *Vibrio cholerae* and plays an important role in the pathogenesis of cholera
T. Patra, T. Ramamurthy, A.C. Ghose, and R.K. Nandy

- 10:20 – 10:45 Mouse vs. Human: Renal Cells Targeted by Shiga toxin (Stx2) in Kidney Disease.
Tom Obrig, Fumiko Obata, Mitchell Psotka, Lisa Gross, Jun Fujii
- 10:45 – 11:10 Cytotoxic effect of *Vibrio parahaemolyticus* thermostable direct hemolysin is dependent on lipid rafts
Shigeaki Matsuda, Toshio Kodama, Natsumi Okada, Kanna Okayama, Takeshi Honda, and Tetsuya Iida
- 11:10 – 11:35 Coffee break
- 11:35 – 12:00 Bacterial cytoskeleton RodZ involves post-transcriptional processing of Shigella type III secretion system
Jiro Mitobe, Itaru Yanagihara, Kiyohisa Ohnishi, Shouji Yamamoto, Makoto Ohnishi, Akira Ishihama and Haruo Watanabe
- 12:00 – 12:25 Adherent effects of enterohaemorrhagic *Escherichia coli* to human intestinal epithelial cells on its Shiga toxins production
Takeshi Shimizu and Masatoshi Noda
- 12:25 – 12:50 Localization of Shiga toxin receptor, globotriasosylceramide (CD77), in human brain and kidney in Japan
Jun Fujii, Tetsuya Mizoue, Toshiro Kita, Hiroshi Kishimoto, Kosuke Joh, Yuri Nakada, Sadao Ugajin, Yuka Naya, Tsutomu Nakamura, Kyoko Saitoh, Yasuo Maruyama, and Shin-ichi Yoshida
- 12:50 – 14:20 Lunch break
- 14:20 – 15:20 **Poster session 2: Introduction** (short oral presentati^os of selected posters)
Presenters to be announced
- 15:20 – 16:20 **Poster session 2: Discussion**
Coffee break
- Oral session 5: Pathogenicity II & Genetics**
Co-chairs: G. Balakrish Nair & Tetsuya Iida
- 16:20 – 16:45 Intestinal adherence with colonization factor CS6 variants isolated from enterotoxigenic *Escherichia coli*
Nabendu S. Chatterjee, Subrata Sabui, Anusuya Debnath, T. Ramaurthy and Takashi Hamabata
- 16:45 – 17:10 Identification of SubAB receptor and its signaling pathway associated with BiP cleavage leading to apoptosis.
Kinosuke Yahiro, Naoko Morinaga, and Masatoshi Noda
- 17:10 – 17:35 A chitin-induced small RNA regulates natural competence in *Vibrio cholerae* through translational activation of a positive regulatory gene *tfoXVC*
Shouji Yamamoto, Hidemasa Izumiya, Jiro Mitobe, Masatomo Morita, Eiji Arakawa, Makoto Ohnishi, and Haruo Watanabe
- 17:35 – 18:00 Carbon metabolism influences virulence gene expression in *Shigella flexneri*
Shelley M. Payne and Aja L. Gore
- 18:00 – 18:25 Regulatory mechanisms of Vp-PAI' s gene expression of *Vibrio parahaemolyticus*
Toshio Kodama, Kazuyoshi Gotoh, Hirotaka Hiyoshi, Kaori Izutsu, Yukihiro Akeda, Takeshi Honda, and Tetsuya Iida
- 18:25 – 18:55 **Poster session 2: Removal**

Wednesday, December 8 (Day 3)

Oral session 6: Miscellaneous subjects

Co-chairs: Firdausi Qadri & Tetsuya Iida

- 9:00 – 9:25 Persistent induction of antimicrobial chemokine MIP-3 α / Ccl20 in the intestinal epithelial cells by bacterial DNA.
Santasabuj Das, Pujarini Dutta, Atri Ta and Yoshifumi Takeda
- 9:25 – 9:50 Isolation of a protein factor from human colon epithelial cell line HT-29 converting VBNC *Vibrio cholerae* to the culturable state
Mitsutoshi Senoh, Jayeeta Ghosh-Banerjee, Thandavarayan Ramamurthy, Takashi Hamabata, Takashi Kurakawa, Makoto Takeda, Rita R. Colwell, G. Balakrish Nair and Yoshifumi Takeda
- 9:50 – 10:15 Phage-biotyping, a scheme revealing the biological differences between toxigenic and nontoxigenic El Tor strains of *Vibrio cholerae*
Biao Kan
- 10:15 – 10:40 *Campylobacter jejuni* invades M cells through specific flagellar binding to human receptor GP2
Fukunaga, H., Ohno, H., Guerry, P., Shima, K., Ewing, C. and D. Kopecko
- 10:40 – 10:50 **Closing remarks**
- 10:50 – 13:00 Lunch break
- 13:00 – 19:00 **Free discussion** on non-biomedical factors (optional)
- 19:00 – 21:00 **Panel discussion** (Panel members only)