



International Seminar on One Health Towards Mosquito-Borne Disease Control and Antimicrobial Resistance



Country: Japan and Bangladesh
Organizing Institutions: Ehime University, Japan and University of Dhaka, Bangladesh
Dated: 27th January, 2022
9:30-15:10 Bangladesh standard time (BST)
12:30-18:10 Japan standard time (JST)

Outline of the Seminar

Commencement: 9:30 – 9: 35 (BST)/ 12:30 –12:35 (JST)



Introductory talk: 9:35– 9:50 (BST)/ 12:35 –12:50 (JST)
Professor Kozo Watanabe
Center for Marine Environmental Studies (CMES), Ehime University, Japan

Two Session

Session 1. Mosquito-borne disease study



9:50– 10:10 (BST)/ 12:50 –13:10 (JST)
21 years of dengue outbreaks in Bangladesh.
Dr. Mohammad Sorowar HOSSAIN
Executive Director, Biomedical Research Foundation (BRF), Bangladesh, and Associate Professor, Dept of Environmental Science and Management, Independent University, Bangladesh



10:10– 10:30 (BST)/ 13:10 –13:30 (JST)
Spatio-Temporal and Numerical Data Resolution Affect the Performance of Machine Learning in Dengue Forecast. A Case Study in Metropolitan Manila, Philippines.
Micanaldo E. FRANCISCO
M2 student, Molecular Ecology and Health laboratory (MecoH), Ehime University, Japan



10:30– 10:50 (BST)/ 13:30 –13:50 (JST)
Viral DNA forms of cell fusing agent virus (CFAV) are produced in *Aedes aegypti* mosquito cell lines
Mohammad Mosleh UDDIN
Research student, Molecular Ecology and Health laboratory (MecoH), Ehime University, Japan



10:50– 11:10 (BST)/ 13:50 –14:10 (JST)
Insecticide resistance status and future insecticide choices for vector control strategies in Bangladesh.
Dr. Ashekul ISLAM
Assistant Professor, Department of Biochemistry and Molecular Biology, Maulana Bhashani Science and Technology University, Bangladesh



11:10– 11:30 (BST)/ 14:10 –14:30 (JST)
Population genomics of dengue mosquito *Aedes aegypti* from fine-spatial scale Metropolitan Manila Philippines
Atikah Fitria MUHARROMAH
DI student, Molecular Ecology and Health laboratory (MecoH), Ehime University, Japan

General Discussion: 11:30– 12:00 (BST)/ 14:30 –15:00 (JST)
Lunch Break: 12:00–13:00 (BST)

Session 2. Antimicrobial Resistance (AMR) study



13:00– 13:20 (BST)/ 16:00 –16:20 (JST)
Circulation risk of antibiotic resistance genes via water environment
Prof Satoru SUZUKI
Laboratory of Marine Molecular Ecology (MME), Ehime University, Japan



13:20– 13:40 (BST)/ 16:20 –16:40 (JST)
Contamination of antibiotics in finfish and shellfish aquaculture of Bangladesh: assessment of ecological, resistance and human health risk.
Dr. Anwar HOSSAIN,
Associate Professor, Department of Fisheries, Faculty of Biological Sciences, University of Dhaka, Bangladesh.



13:40– 14:00 (BST)/ 16:40 –17:00 (JST)
Application of wastewater-based epidemiology (WBE) for ARB
Prof Toru WATANABE
Department of Food, Life & Environmental Sciences
Faculty of Agriculture, Yamagata University



14:00– 14:20 (BST)/ 17:00 –17:20 (JST)
Prevalence of efflux pump genes and their correlations with antibiotic resistance in the clinical isolates of *Staphylococcus aureus* bacteria.
Tanjina Akter SUMA
M. Pharm Student, Department of Clinical Pharmacy and Pharmacology, Faculty of Pharmacy, University of Dhaka, Bangladesh.



14:20– 14:40 (BST)/ 17:20 –17:40 (JST)
Bacterial diversity and antibiotic resistant bacteria in finfish aquaculture of Bangladesh
Abdul Kuddus APU,
B. Pharm Student, Faculty of Pharmacy, University of Dhaka, Bangladesh.

General Discussion: 14:40– 15:10 (BST)/ 17:40 –18:10 (JST)

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Ecological Approaches to Mosquito-borne Disease Control**

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Meeting ID: 985 351 9232
Passcode: admA0507