









# **JICA Scientific Meeting**

For

Research on SARS-CoV-2 response to effective detection, discovery and production of biotherapeutic against SARS-CoV-2 and other viral pathogens

## Organized by

Bamrasnaradura Infectious Diseases Institute (BIDI)

Faculty of Tropical Medicine, Mahidol University (FTM, MU)

Department of Medical Sciences, Ministry of Public Health (DMSc, MOPH)

### In collaboration with

Research Institute for Microbial Diseases, Osaka University (RIMD, OU)

International Center for Biotechnology, Osaka University (ICB, OU)

Faculty of Pharmaceutical Sciences, Chulalongkorn University (FPS, CU)

Faculty of Medicine, King Mongkut's Institute of Technology, Ladkrabang (FM, KMITL)

## Wednesday 10<sup>th</sup> August 2022

## Sukosol Hotel, Bangkok, Thailand

## Program

8.30 – 8.50	Registration		
8.50 - 9:00	JICA Global Health and Medicine (VDO)		
9.00 - 9.15	Opening Remark		
	- Mr. Morita Takahiro Chief Representative JICA Thailand office		
	- <b>Assoc. Prof. Dr. Weerapong Phumratanaprapin</b> Dean; Faculty of Tropical Medicine, Mahidol University (VDO)		
	- <b>Dr. Kitpong Sunchatawirul</b> , Director; Bamrasnaradura Infectious Diseases Institute, Department of Disease control, Ministry of Public Health		
	- <b>Prof. Dr. Tatsuo Shioda</b> ; Research Institute for Microbial Diseases (RIMD), Osaka University, Osaka, Japan		
9.15-9.20	JICA supported projects at Faculty of Tropical Medicine 2009-2022, Reported by Assoc. Prof. Dr. Pongrama Ramasoota (FTM, MU)		
9.20-9.25	Group Photo		
Session 1;	SAR-CoV-2 at BIDI		
Chair persons	s; Prof. Shioda, Dr. Pongrama		
9.25-9.45	Visal Moolasart (BIDI)	Abstract 1.1	
	COVID-19 in Bamrasnaradura Infectious Diseases Institute (BIDI), Pediatrician's experiences		
9.45-10.05	Sumonmal Uttayamakul (BIDI)	Abstract 1.2	
	Capacity building for SAR-CoV-2 genomic variants detection in BIDI		
10.05-10.20	Coffee break		

Session 2;	HuMAb production and characterization against SAR-CoV-2

Chair persons; Prof. Shioda, Dr. Pongrama

## 10.20 -10.40 Waranyoo Phoolcharoen (FPS, CU)

Abstract 2.1

Plant-produced SARS-Cov2 Monoclonal antibodies

### 10.40 -11.00 Panadda Dhepakson (Medical Life Sciences Institute, DMSc) Abstract 2.2

Development of recombinant human monoclonal antibodies with pan-neutralizing activities against SARS-CoV-2 variants and Establishment of a protein- based surrogate and pseudotype virus neutralization assay for SARS-CoV-2

## 11.00 -11.20 Surachet Benjathummarak (FTM-MU) (Online)

Abstract 2.3

Generation of a single-chain fragment variable (scFv) antibody against SARS-CoV-2 RBD protein using convalescent patients-derived phage display libraries (FTM-MU)

## 11:20-11:40 Tadahiro Sasaki (RIMD, Osaka University)

Abstract 2.4

Anti-nucleocapsid antibodies may be related to the severity of COVID-19

### 11.40–12.00 Atsushi Yamanaka (RIMD, Osaka University)

Abstract 2.5

Antibody Dependent Enhancement (ADE) of SARS-CoV-2 infection

12:00-13:00 Lunch

#### Session 3: HuMAb production and characterization against dengue virus

Chair persons; Dr. Yamanaka, Dr. Pongrama

## 13.00–13.20 Pongrama Ramasoota (FTM-MU)

Abstract 3.1

Therapeutic human monoclonal antibody against dengue virus; toward commercialization

### 13.20 -13.40 Subenya Injampa (Faculty of Medicine, KMITL)

Abstract 3.2

Characterization of Fc modification of anti-Envelope human monoclonal antibodies against dengue virus

#### 13.40 -14.00 Pannamthip Pitaksajjakul (FTM-MU)

Abstract 3.3

Potential dengue therapeutic candidates based on dengue NS1 protein

#### **Session 4:** Biotherapeutics discovery and production

Chair persons; Dr. Sasaki, Dr. Pongrama

14.00-14.20 Charin Thawornkuno (FTM-MU)

Abstract 4.1

Egg laying hen: a promising platform for therapeutic antibody production

14.20 -14.40 Ryo Misaki (ICB, OU) (Online)

No Abstract

New technology for biotherapeutic production

14.40 -15.00 Kazuhito Fujiyama (ICB, OU) (Online)

No Abstract

Biotherapeutic production in plant

15.00 -15.20 Dr. Xin Liu (Sphere fluidic Co. Ltd.) (Online)

Abstract 4.2

CYTO-MINE® And Novel Bioassays Accelerating Biotherapeutics Discovery

And Development

15.20-15.35 Coffee break

15.35 -16.00 Discussion for future research collaboration on Biologics development

16.00-16.10 Conclusion and closing remarks

### **Registration:**

ลงทะเบียนยืนยันเข้าร่วมการประชุม ณ โรงแรมสุโกศลได้ที่ https://forms.gle/KdmXkmM6bnLRw5Xq5

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