

e-ASIA Joint Research Program (e-ASIA JRP)
Joint Research Project Urgent Call for Proposals on the topic of
“Countermeasures for COVID-19 in Medical Research”.

It is our great pleasure to announce the selected projects of the e-ASIA Joint Research Program (e-ASIA JRP)*¹ COVID-19 Urgent Call for Proposals on the topic of “Countermeasures for COVID-19 in Medical Research”.

A total of 10 proposals was submitted in response to the Urgent Call for proposals. After careful consideration based on the peer review results by the 5 funding organizations from 5 countries participating in the call*², the following 5 collaborative projects were selected for support with the approval of the e-ASIA JRP Board.

“Non-human primate and translational models of SARS-CoV2 infection and COVID-19 vaccine development”

to be conducted jointly by:

Thailand: Suchinda Malaivijitnond, Director, National Primate Research Center of Thailand-Chulalongkorn University (NPRCT-CU)

USA: Jeffrey A Roberts, Associate Director, University of California Davis

This research project aims to share and compare experimental protocols and clinical data on non-human primates (NHPs) infected with SARS-CoV-2 between three National Primate Research Centers in Thailand, USA and Japan which will be translated to COVID-19 vaccine development in each country. Surveillance and evolutionary biology of SARS-CoV-2 will be assessed using developed assays in human-macaque interface areas in Thailand.

“Genetics, Immunological and Neurological Long-term Consequences in Prospective COVID-19 Cohort in Thailand, Japan, Philippines and USA”

to be conducted jointly by:

Thailand: Nattiya Hirankarn, Professor, Chulalongkorn University

Japan: Kunihiko Otsuka, Designated Assistant Professor, Tokushima University

USA: Douglas Golenbock, Professor, UMass Medical School

Philippines: Fresthel Monica Climacosa, Associate Professor, University of the Philippines Manila

This cooperative research project aims to identify genetics and immunological and neurological long-term consequences of COVID-19 infection by a prospective cohort of COVID-19 affected patients from different genetic and epidemiologic background in Thailand, Japan, and Philippines in parallel to another on-going cohort in United States. This collaboration will shed light on the possible factor(s) that contribute to disease severity and long-term impact in recovered COVID-19 patients.

“Long-term immunity to SARS-CoV-2 in influencing COVID-19 disease outcome in Asia”

to be conducted jointly by:

Japan: Meng Ling Moi, Professor, Nagasaki University

USA: Sujan Shresta, Associate Professor, La Jolla Institute for Immunology

Vietnam: Thi Quynh Mai Le, Vice Director, National Institute of Hygiene and Epidemiology

Philippines: Kathryn Roa, Infectious Disease Specialist, Southern Philippines Medical Center

This cooperative research project aims to decipher how immunity in SARS-CoV-2 virus infection modulates disease manifestations and whether viral genetic diversity is associated with disease outcomes and infectivity across Southeast and East Asia. In addition, this project seeks to identify novel broadly neutralizing antibodies against SARS-CoV-2 for the development of innovative diagnostics and therapeutics.

“Roles of T follicular helper cells and tissue resident memory cells of mucosal immunity in COVID-19 disease severity”

to be conducted jointly by:

Japan: Kazuko Yamamoto, Assistant Professor, Nagasaki University Hospital

USA: Jay Kolls, John W Deming Endowed Chair in Internal Medicine, Tulane School of Medicine

In this US-Japan cooperative research project, we aim to elucidate the role of T follicular helper cells and airway tissue resident memory cells in generating protective immune response in airway mucosa during COVID-19. Synergy of our unique in vivo disease model and analysis of SARS-CoV-2 specific antibodies from patients will directly connect to the development of novel vaccine against COVID-19.

“Comprehensive elucidation of the host factors contributing to severe COVID-19 using large U.S. and Japanese cohorts”

to be conducted jointly by:

USA: Ho Namkoong, Visiting Fellow, National Institute of Allergy and Infectious Diseases

Japan: Sho Shibata, Assistant Professor, Tokyo Medical and Dental University

This cooperative research project aims to comprehensively elucidate the host factors of COVID-19 and to find out future therapeutic strategies by utilizing the cohort established by the United States team and by the Japanese team. Specifically, we will genetically analyze DNA/RNA/serum samples from both countries to identify genetic factors and biomarkers that lead to severe COVID-19 and post-acute COVID-19.

*1 The e-ASIA Joint Research Program (e-ASIA JRP)

Through exchange and collaboration, the e-ASIA Joint Research Program (e-ASIA JRP) aims to strengthen scientific and technological research and development capabilities towards resolving shared challenges across the East Asia region. These include challenges associated with materials, alternative energy, agriculture, health research, disaster risk reduction and management, advanced interdisciplinary research towards innovation, and environment.

As part of that objective, the e-ASIA JRP is intended to support collaborative research among three or more of its member countries, in principle. Through joint research among participating countries in agreed fields, it is the goal of the e-ASIA JRP to contribute to economic and human resource development, and to the resolution of various challenges in the region.

e-ASIA JRP's homepage: <http://www.the-easia.org/jrp/>

*2 The list of organizations participating in the COVID-19 Urgent Call for proposals on the topic of "Countermeasures for COVID-19 in Medical Research".

- Agency for Medical Research and Development (AMED), Japan
URL: <https://www.amed.go.jp/en/>
- Department of Science and Technology-Philippine Council for Health Research and Development (DOST -PCHRD), Philippines
URL: <http://pchrd.dost.gov.ph/>
- National Science and Technology Development Agency (NSTDA), Thailand
URL: <https://www.nstda.or.th/en/index.php>
- : National Institute of Allergy and Infectious Diseases (NIAID), USA
URL: <http://www.niaid.nih.gov/>
- Ministry of Science and Technology (MOST), Vietnam
URL: <http://www.most.gov.vn/Desktop.aspx/Home-EN/>

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