

**e-ASIA Joint Research Program (e-ASIA JRP)  
Joint Research Project in the field of “Health Research”  
on the topic of**

**“Infectious Diseases (including AMR), Cancer, and Mental Health, with a  
focus on precision medicine in Cancer and Infectious Diseases”**

It is our great pleasure to announce the selected projects of the e-ASIA Joint Research Program (e-ASIA JRP)\*<sup>1</sup> 9<sup>th</sup> Call for Proposals in the field of “Health Research” on the topic of “Infectious Diseases, Antimicrobial and Multidrug Resistance, and Cancer Research”.

A total of 40 proposals was submitted in response to the 9<sup>th</sup> joint call for proposals. After careful consideration based on the peer review results by the 12 funding organizations from 12 countries participating in the call\*<sup>2</sup>, the following 5 collaborative projects were selected for support with the approval of the e-ASIA JRP Board. Support to the projects will continue for three years.

**“Role of the pre-existing immunity to Japanese encephalitis and Zika viruses in influencing dengue disease outcome and vaccination program in Vietnam and Thailand”**

to be conducted jointly by:

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

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

Thailand: Montarop Yamabhai, Director of Molecular Biotechnology, Suranaree University of Technology

This cooperative research project aims to decipher whether cross-reactive immunity to Japanese encephalitis (JEV) and Zika (ZIKV) viruses modulates disease manifestations and viral genetic diversity during subsequent infection with dengue virus (DENV) in Vietnam and Thailand. In addition, this project seeks to identify novel broadly neutralizing antibodies against DENV, JEV, and ZIKV for the development of innovative diagnostics and therapeutics.

**“Novel precision-based treatments for biliary tract cancer”**

to be conducted jointly by:

Australia: John Mariadason, Professor, Olivia Newton-John Cancer Research Institute, La Trobe University

Thailand: Temduang Limpaboon, Professor, Khon Kaen University

Japan: Yoshimasa Saito, Professor, Keio University

This cooperative research project aims to improve outcomes for patients with biliary tract cancer. We will achieve this by building essential research capacity in this poorly understood disease through international collaboration, and building on

our team's exciting preliminary discoveries to develop novel precise treatments which precisely target specific aspects of tumour biology, and to identify biomarkers which predict response to immunotherapy.

**“Identification of molecular and cellular pathways predicting susceptibility or resistance to severe dengue fever”**

to be conducted jointly by:

Australia: Diana Hansen, Laboratory Head, The Walter and Eliza Hall Institute of Medical Research

Indonesia: Tedjo Sasmono, Senior Research Fellow / Head of Dengue Research Unit, Eijkman Institute for Molecular Biology

Japan: Kouichi Morita, Dean & Professor, Nagasaki University

This cooperative research project aims to undertake a comprehensive immunological and molecular analysis of individuals with mild versus severe dengue fever recruited at local hospitals in Jakarta, Indonesia. The project will uncover key processes responsible for disease severity. This information will identify specific biomarkers for innovative diagnostic tools for early prediction/detection of cases that will progress to complicated dengue.

**“e-DiVA (empowering Dementia Carers with an iSupport Virtual Assistant)”**

to be conducted jointly by:

Australia: Tuan Anh Nguyen, NHMRC-ARC Dementia Research Development Fellow-Senior Research Fellow, University of South Australia

Indonesia: Yuda Turana, Lecturer, Atma Jaya Catholic University of Indonesia

New Zealand: Sarah Cullum, Senior Lecturer, The University of Auckland

Vietnam: Thang Pham, Chairman, Vietnam Association Geriatrics and Gerontology

This cooperative research project aims to improve mental health and well-being of informal carers of people with dementia by: (1) developing and evaluating an iSupport Virtual Assistant to support dementia carers through a partnership of Australia, Indonesia, New Zealand, and Vietnam; and (2) building capacity of researchers and Non-Government Organisation (NGO) partners to support this development and evaluation.

**“Cooperation of Vietnam, Myanmar and Russia in the development of new targeted agents against viral and parasitic infections based on plant metabolites”**

to be conducted jointly by:

Russia: Irina Smirnova, Reseacher, Ufa Federal Research Center of the Russian Academy of Science

Vietnam: VAN LOC TRAN, Associate Professor, Institute of Chemistry

Myanmar: Myint Myint Khine NiL, Professor, University of Yangon

This cooperative research project aims to develop new targeted agents based on natural metabolites of the flora of Vietnam, Myanmar and Russia, modify their chemical structures to enhance their activity for treatment of infectious and parasite diseases. Researchers will concentrate in finding out active candidates for the care of diseases caused by SARS-COV-II and dengue virus as well as by the malaria parasites.

On behalf of the e-ASIA JRP, we would like to offer our sincerest congratulations to the project teams, and look forward to the significant impact their results will bring to our society in the future.

\*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. 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 9<sup>th</sup> joint call for proposals in the field of "Health":

- National Health and Medical Research Council (NHMRC), Australia  
URL: <https://www.nhmrc.gov.au/>
- Ministry of Health (MOH), Cambodia  
URL: <http://moh.gov.kh/?lang=en>
- Ministry of Research and Technology/ National Research and Innovation Agency (RISTEK/BRIN), Indonesia  
URL: <https://international.ristekdikti.go.id/>
- Japan Agency for Medical Research and Development (AMED), Japan  
URL: <http://www.amed.go.jp/en/>
- Ministry of Health (Lao PDR)  
URL: <http://moh.gov.la/index.php/en/>

- Health Research Council (HRC), New Zealand  
URL: <http://www.hrc.govt.nz/>
- Department of Science and Technology (DOST-PCHRD), Philippines  
URL: <http://www.pchrd.dost.gov.ph/>
- Russian Foundation for Basic Research (RFBR), Russia  
URL: <http://www.rfbr.ru/rffi/eng/>
- Ministry of Education (MOE), Myanmar  
URL: <http://www.moe.gov.mm/en/>
- Thailand Center of Excellence for Life Sciences (TCELS), Thailand  
URL: <http://www.tcels.or.th/Home?lang=en>
- 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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