

The e-ASIA Joint Research Program
4th Annual Activity Report - Summary
(2015.8 ~ 2016.7)



e-ASIA JRP Secretariat

Basic Information:

This yearly report summarizes the activities of the e-ASIA Joint Research Program during the period from the Fourth Annual Board Meeting (August 12, 2015) to the Fifth Annual Board Meeting (August 3, 2016).

First Edition

This report was originally approved on Jun 23, 2017

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Program Administration

The 4th Annual Board Meeting

1. The 4th Annual Board Meeting was held on August 11 and 12, 2015 in Yangon, Myanmar, chaired by the Ministry of Science and Technology (MOST) of the Republic of the Union of Myanmar.
2. Those items that had been approved by the Board through ad hoc Board Meetings were reviewed at the 4th Annual Board Meeting.
3. The Board discussed and agreed not to take "Peer Review Panel" as an evaluation method and to delete "Peer Review Panel" in the Program Statute. Instead, the Board agreed to add a sentence that stipulates each Member Organization takes responsibility for their own review process.
4. The Board accepted the results of the second Scientific Advisory Council ("SAC") Meeting and agreed that the duration of membership of the Council as well as the terms of its Chair and Vice-Chair shall be three years. The SAC Members as well as the Chair and Vice-Chair can serve for two terms in succession if they are re-selected. The Board also agreed that each Member Organization could nominate an SAC Member if they choose to do so (i.e. multiple SAC Members from one country are acceptable).
5. The Board agreed to redefine/rename the fields of cooperation under the Program as follows (areas that the Program puts particular emphasis on are in parentheses):
 - (i) Materials (Nanotechnology)
 - (ii) Alternative Energy
 - (iii) Agriculture (Food)
 - (iv) Health Research (Infectious Diseases, Cancer)
*Deleted "prioritized areas" and "research" after "cancer"
 - (v) Disaster Risk Reduction and Management
*Agreed to include post-disaster research as supportable

(vi) Advanced Interdisciplinary Research towards Innovation

*Remains unchanged

(vii) Environment (Climate Change, Marine Science)

6. The Board enthusiastically welcomed the JST statement that it intends to support the Program Secretariat for the next term of 3 years. The Board expressed great appreciation to JST and NSTDA for their continuous contribution to the Program Secretariat and their assignment of its capable staff.

7. Other topics that were discussed at the meeting include contents of Progress Report, responsibilities of Member Organizations that support projects by “in-kind” and “re-budgeting”, “Guest Partners”, conditions/requirements to launch calls or start funding, development of an “e-ASIA Grantee Network”, possibility of e-ASIA specialized scholarship funds, promotion of the program, reviews on the previous workshops and updates on upcoming workshops etc.

8. Minutes of the 4th Annual Board Meeting were posted on the website.

The 11th ad hoc Board Meeting

9. The 11th ad-hoc Board Meeting was held via email at the end of March 2016.

10. 2 projects from the 5th call for proposals in the field of ‘Disaster Risk Reduction and Management’ and 1 project in the field of ‘Intelligent Infrastructure for Transportation’ were formally approved to be supported by the Board.

The 12th ad hoc Board Meeting

11. The 12th ad hoc Board Meeting was held via email in June 2016.

12. 4 projects from the 5th call for proposals in the field of ‘Health Research’ were formally approved to be supported by the Board.

The 3rd Scientific Advisory Council (SAC) Meeting

13. The 3rd SAC Meeting was held on April 21, 2016 in Manila, the Philippines.

14. The SAC Members discussed the main agenda items, including, conditions of “Guest Partner” suggested at the 4th Annual Board Meeting.

15. Though the Board agreed in the 4th Annual Board Meeting that each Member Organization could nominate an SAC Member, the SAC Members discussed to maintain 1 SAC member from 1 country and expressed concerns that (1) if number of SAC Member continues to increase, that would make it difficult for the SAC to reach a consensus in the limited one day meeting and (2) opinions from a country with more SAC members should be reflected in SAC recommendations.







16. The SAC Members also discussed revised Terms of Reference of the SAC, the format of final report, prioritized area of cooperation, cooperation with other programs and formation of an e-ASIA Alumni network.

17. Minutes of the 3rd SAC Meeting is to be posted on the website.

Members

1. List of current Member Organizations and their Board Members and representatives in alphabetical order by country (as of July 2016).

*17 Member Organizations from 12 countries

Country	Name	Title & Organization
 Cambodia	Dr. Kheng Sim	Deputy-Director of Communicable Disease Control Department, MOH
 Indonesia	Prof. Ocky Radjasa	Directorate General of Research and Development, Ristekdikti
 Japan	Mr. Masahiko Noda	Managing Director of Department of International Affairs, AMED
 Japan	Dr. Michinari Hamaguchi	President, JST
 Lao PDR	Dr. Silap Boupaha	Director of ASEAN and International Organization Affairs, MOST
 Lao PDR	Dr. Bounlay Phommasack	Deputy Director General of the Department of Hygiene and Prevention, MOH

 Malaysia	(TBD)	MOSTI (Status: Quasi Member)
 Myanmar	Dr. Win Khaing Moe	Acting Director General, Myanmar Scientific and Technological Research Department, MOST
 New Zealand	Prof. Kathryn McPherson	Chief Executive, HRC
 The Philippines	Dr. Rowena Cristina L. Guevara	Undersecretary for Research & Development, DOST
 Russian Federation	Mr. Oleg Sharipov	Head of International Relations, RFBR
 Thailand	Ms. Kunvara Chotiphansophon	Deputy Director, ARDA
 Thailand	Dr. Thaweesak Koanantakool (deputy: Dr. Chadamas Thuvasethakul)	President, NSTDA (Executive Vice President, NSTDA)
 Thailand	Dr. Nares Damrongchai	CEO, TCELS
 U.S.	Mr. F. Gray Handley	Associate Director for International Research Affairs, NIAID
 U.S.	Dr. Paul Pearlman	Director, Center for Global Health, NCI
 Vietnam	Ms. Le Thi Viet Lam	Deputy Director General of Department of International Cooperation, MOST

Joint Calls for Proposals

1. The 5th Joint Call for Proposals in the field of 'Disaster Risk Reduction and Management' was launched by the following 6 Member Organizations.
Indonesia: State Ministry of Research and Technology (RISTEK) *new or in-kind*
Japan: Japan Science and Technology Agency (JST) *new*
The Philippines: Department of Science and Technology (DOST) *new or in-kind*
Russia: Russian Foundation for Basic Research (RFBR) *new or in-kind*
Thailand: National Science and Technology Development Agency (NSTDA) *new*
Vietnam: Ministry of Science and Technology (MOST) *in-kind*

The following 2 projects were approved by the Board to be supported.

“Development of Information Gathering and Utilization Systems using small UAV for Disaster Risk Assessment, Monitoring and Response” to be jointly supported by RISTEK of Indonesia, JST of Japan, DOST of the Philippines, NSTDA of Thailand and MOST of Vietnam.

“Monitoring and prediction of extreme weather using lightning detection network and micro-satellites” to be jointly supported by RISTEK of Indonesia, JST of Japan and DOST of the Philippines.

2. The 5th Joint Call for Proposals in the field of 'Intelligent Infrastructure for Transportation' was launched by the following 6 Member Organizations.

Indonesia: State Ministry of Research and Technology (RISTEK) *new or in-kind*

Japan: Japan Science and Technology Agency (JST) *new*

Myanmar: Ministry of Science and Technology (MOST) *in-kind*

The Philippines: Department of Science and Technology (DOST) *new or in-kind*

Thailand: National Science and Technology Development Agency (NSTDA) *new*

Vietnam: Ministry of Science and Technology (MOST) *in-kind*

The following 1 project was approved by the Board to be supported.

“IITSL: Intelligent Integrated Transport for Smart Life” to be jointly supported by JST of Japan, DOST of the Philippines and NSTDA of Thailand.

3. The 5th Joint Call for Proposals in the field of 'Bioenergy' was launched by the following 6 Member Organizations.

Indonesia: State Ministry of Research and Technology (RISTEK) *new or in-kind*

Japan: Japan Science and Technology Agency (JST) *new*

Lao PDR: Ministry of Science and Technology (MOST) *in-kind*

Myanmar: Ministry of Science and Technology (MOST) *in-kind*

Thailand: Agricultural Research Development Agency (ARDA) *new*

Vietnam: Ministry of Science and Technology (MOST) *in-kind*

The selection is in progress.

4. The 5th Joint Call for Proposals in the field of 'Health Research: Infectious Diseases, Cancer Research' was launched by the following 10 Member Organizations.

Cambodia: Ministry of Health (MOH) *in-kind*

Indonesia: State Ministry of Research and Technology (RISTEK) *new or in-kind*

Japan: Japan Agency for Medical Research and Development (AMED) *new*

Lao PDR: Ministry of Health (MOH) *in-kind*

Myanmar: Ministry of Science and Technology (MOST) *in-kind*

New Zealand: Health Research Council (HRC) *new*

Russia: Russian Foundation for Basic Research (RFBR) *new or in-kind*

USA: National Institute of Allergy and Infectious Diseases (NIAID) *re-budgeting or in-kind*

National Cancer Institute (NCI) *re-budgeting or in-kind*

Vietnam: Ministry of Science and Technology (MOST) *new or in-kind*

The following 4 projects were approved by the Board to be supported.

“Dengue viral genetic diversity in selected populations in Myanmar” to be jointly supported by AMED of Japan, MOST of Myanmar and NIAID of the U.S.

“Characterization of multidrug resistance Gram-negative bacteria carrying antibiotics-resistance gene which have been inserted to chromosome” to be jointly supported by RISTEK of Indonesia, AMED of Japan and MOST of Vietnam.

“Health impact of Opisthorchiasis infection in Cambodia and Vietnam : prevalent surveillance of Opisthorchiasis and risk surveillance for liver cancer” to be jointly supported by AMED of Japan, MOH of Cambodia, MOST of Vietnam.

“Collaborative fever etiology research in Southeast Asia” to be jointly supported by MOH of Lao P.D.R., MOST of Myanmar and HRC of New Zealand,

Researcher Interaction

Workshop in Myanmar

1. A workshop in the field of "Emerging Infectious Disease and Cancer Priorities

in South East Asia and the Pacific Rim", sponsored by NIAID, NCI, University of Maryland and AMED, organized jointly with the Program Secretariat and hosted by MOST of Myanmar, was held on August 13 and 14, 2015, in Yangon, Myanmar in conjunction with the 4th Annual Board Meeting.

2. Scientific Planning Council (SPC) was set up, and SPC appointed speakers not only from US & Japan but also from Asian countries: Indonesia, Myanmar, Thailand and Vietnam participated in the workshop. 57

researchers/administrative persons in total participated in the workshop.

3. The workshop was held with an expectation to foster relationships between meeting participants to promote the development of collaborative research proposals for submission to the e-ASIA JRP during its next call for proposals in the health sector. Call in "Health Research" field was closed on September 29th, 2015 and it received 17 preproposals

4. The summary of the workshop was posted on the website.

Workshop in Thailand

5. An e-ASIA project workshop, co-organized by NSTDA of Thailand, JST of Japan and the Program Secretariat, was held in October 12, 2015 at Thailand Science Park, Bangkok, Thailand. Its objectives were to disseminate the e-ASIA JRP information on the call for proposals, research theme, criteria for the grant, etc. and to present and share the information of the funded e-ASIA JRP Projects.

6. Around 50 attendants including researchers from the three funded e-ASIA projects from Vietnam, Philippines, Japan and Thailand as well as interested attendants from both research institutes and universities in Thailand participated in the workshop.

7. The agenda was divided into three main sessions, 1) Final Project Presentation of Cassava Project, 2) Project Progress Presentations of "Biosensor" and "Corrosion Mapping" projects, 3) e-ASIA JRP Presentation by the Program Secretariat.

8. The summary of the workshop is to be posted on the website.

Workshop in Japan

9. A workshop in the field of “Green and Bio Nanotechnology for Innovative Materials System”, co-organized JST of Japan and the Program Secretariat, and hosted by JST, was held on January 30, 2016 in Tokyo, Japan in conjunction with a large international conference in this field.

10. The workshop was attended by over 30 participants including 2 Keynote Speakers and 17 Invited Speakers from Japan, Philippines, Thailand, Indonesia, Vietnam, and Sri Lanka.

11. 1) Green materials technology for environmental purification among the attended 4 countries, Japan, Thailand, Vietnam and the Philippines 2) Green energy technology: advanced organic/inorganic solar cells among the attended 4 countries, Japan, Indonesia, Thailand and Vietnam 3) Green energy technology: thermoelectric and energy harvesting among the attended 4 countries, Japan, Sri Lanka, Thailand and the Philippines were suggested for potential future call opportunities.

12. The summary of the workshop is to be posted on the website.

Selected Projects

The selected projects from the 5th call in the field of “Disaster Risk Reduction and Management”, “Intelligent Infrastructure for Transportation” and “Health Research” are as follows:

“Disaster Risk Reduction and Management”

1. “Development of Information Gathering and Utilization Systems using small UAV for Disaster Risk Assessment, Monitoring and Response” to be conducted jointly by:

Japan: Hiroshi Inoue, Principal Senior Researcher, National Research Institute for Earth Science and Disaster Prevention (NIED)

Philippines: Bartolome C. Bautista, Deputy Director, Philippine Institute of Volcanology and Seismology (PHIVOLCS)

Indonesia: Haryadi Pernama, Director, Indonesian Institute of Sciences (LIPI)

Thailand: Wutthiphat Covanich, Researcher, National Electronics and Computer Technology Center (NECTEC),

Vietnam: Bui Quang Hung, Director, Vietnam National University-University of Engineering and Technology

This collaborative research aims to develop and optimize a system for gathering low-altitude aerial photos using small UAV (drone), and an information management system to utilize the data to strengthen disaster risk assessment, monitoring and response in Asian countries.

2. “Monitoring and prediction of extreme weather using lightning detection network and micro-satellites” to be conducted jointly by:

Japan: Yukihiro Takahashi, Professor, Hokkaido University

Indonesia: Sidik Mulyono, Researcher, Indonesia Agency for the Assessment and Application of Technology (BPPT)

Philippines: Joel J. Marciano, Acting Director, Department of Science and Technology -Advanced Science and Technology Institute (DOST-ASTI)

The goal of this project is to establish the methodology to monitor and predict extreme weather, such as torrential rainfall and/or typhoon, based on the observation with a ground-based lightning detection network and micro-satellites.

“Intelligent Infrastructure for Transportation”

3. “IITSL: Intelligent Integrated Transport for Smart Life” to be conducted jointly by:

Japan: Kenji Doi, Professor, Osaka University

Thailand: Monsak Socharoentum, Researcher, National Electronics and Computer Technology Center (NECTEC)

Philippines: Alexis Fillone, Associate Professor, De La Salle University

This project aims to build up an integrated system for designing, evaluating, and governing intelligent infrastructure of transport and land use for smart life that maximizes people’s QoL by balancing economy and ecology under equity between areas, socioeconomic classes, and generations.

“Health Research”

4. “Dengue viral genetic diversity in selected populations in Myanmar” to be conducted jointly by:

Japan: Meng Ling Moi, Associate Professor, Nagasaki University

Myanmar: Hlaing Myat Thu, Deputy Director General, Department of Medical Research

USA: Sujan Shrestha, Associate Professor, La Jolla Institute for Allergy & Immunology

This collaborative research aims to investigate the Dengue viral genetic diversity in selected populations in Myanmar and determine the host immune response that leads to differing disease outcomes.

5. “Characterization of multidrug resistance Gram-negative bacteria carrying antibiotics-resistance gene which have been inserted to chromosome” to be conducted jointly by:

Japan: Itaru Hirai, Professor, University of the Ryukyus

Vietnam: Bui Thi Mai Huong, Department Head, National Institute of Nutrition

Indonesia: Kuntaman Kuntaman, Professor, Airlangga University

This collaborative research aims to investigate chromosomally located antibiotic resistant genes (ARGs) in asymptomatic healthy human carriers, clinical isolates and isolates from livestock and environmental water.

6. “Health impact of Opisthorchiasis infection in Cambodia and Vietnam : prevalent surveillance of Opisthorchiasis and risk surveillance for liver cancer” to be conducted jointly by:

Japan: Kazuko Miyamoto, Professor, Yamanashi University

Cambodia: Muth Sinuon Helminth, Deputy-Director and Program Manager, National Centre for Parasitology Entomology and Malaria Control / MOH

Vietnam: Nguyen Thu Huong, Vice Chief of Department, Parasitology Department of National Institute of Malaria

This collaborative research aims to provide necessary information to prepare basic health strategies and plans for prevention of *O. viverrini* infection in Cambodia and Vietnam.

7. “Collaborative fever etiology research in Southeast Asia” to be conducted jointly by:

New Zealand: John A. Crump, Professor, Dunedin School of Medicine, University of Otago

Myanmar: Wan Win Htike, Professor, University of Medicine 1

Lao PDR: Mayfong Mayxay, Associate Professor, University of Health Sciences of Lao PDR

This collaborative research aims to conduct Myanmar’s first comprehensive severe febrile illness etiology study to improve patient management guidelines and to target disease prevention efforts; and to understand community patterns of healthcare utilization in Lao PDR and Myanmar to inform health system planning for febrile patients.

For more information, please visit the following website:

<http://www.the-easia.org/jrp/>

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