

SOUTHEAST ASIA-EUROPE JOINT FUNDING SCHEME FOR RESEARCH AND INNOVATION



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Research and Innovation

SOUTHEAST ASIA-EUROPE JOINT FUNDING SCHEME FOR RESEARCH AND INNOVATION (JFS)

WHAT IS THE JFS?

The JFS is an instrument to launch bi-regional, multilateral Joint Calls for Proposals on a regular basis in changing thematic areas of interest to the participating funding agencies. So far, two calls have been launched.

Funding for research projects is provided by funding agencies at national or sub-national level from Southeast Asia and Europe.

The JFS uses a virtual common pot with a juste-retour principle. This means that each funding agency funds "its own researchers". There is no cross-funding. The funding agencies agree on certain rules and parameters but the funding of researchers is according to the own rules of each participating funding agency.

The central management of the JFS is supported by the European Commission (EC) under its Service Facility in Support of the Strategic Development of International Cooperation in Research and Innovation.

THE JFS FUNDS RESEARCH AND INNOVATION PROJECTS.

Usually the following costs are eligible:

- Personnel costs
- Equipment
- Consumables
- Mobility
- Workshops

JOINT CALLS FOR PROPOSALS

To date, the JFS has held two calls. In April 2017, the first Joint Call for Proposals was launched in the thematic areas of Health (Anti-microbial drug resistance, Emerging infectious diseases) and Environment/ Climate Change (Adaptation/Resilience of food production systems, Impacts of Climate Change on Ecosystems/Biodiversity. From 50 proposals submitted, 10 projects were successfully funded, which are presented in this leaflet.

On 18 June 2018, the 2nd Joint Call for Proposals under the JFS was launched in the two thematic areas of Bioeconomy and Infectious Diseases. The deadline for submission was 18 September 2018. Currently the proposals are in the evaluation process and a funding decision is expected for January 2019.



OVERVIEW OF FUNDED PROJECTS FROM THE 1ST SEA-EUROPE JOINT CALL

Acronym	Title	Thematic area	Involved countries	Project budget
CWSSEA	Assessments of vulnerability of mature and secondary forests to climatic water stress in Southeast Asia	Impacts of Climate Change on Ecosystems/ Biodiversity	Thailand Sweden France	346.130€
SKUD	The emergence of Skin Ulceration Diseases in Edible Sea Cucumbers in a Global Change Framework	Emerging infectious diseases	Belgium (Wallonia) 2x Thailand France	178.085€
ThaiVacc	Novel Leptospirosis and Dengue Fever Vaccines for Thailand	Emerging infectious diseases	Thailand Switzerland 2x France	361.254€
FRESHBIO	Freshwater biotas of the insular biodiversity hotspots of Southeast Asia: diversity, biological states and uses	Impacts of Climate Change on Ecosystems/ Biodiversity	France 2x Germany The Philippines Indonesia 2x	179.620€
PlasmID-SEA	Plasmid Identification and Detection in South-East Asia - Enterobacteriaceae resistant to last resort Carbapenems and Colistin	Anti-microbial drug resistance	Sweden 3x Thailand Lao PDR Vietnam	306.000€
FarmResist	Occupational risks for animal farmers to be colonised with animal-associated resistant bacteria in Thailand, impact on the faecal microbiota.	Anti-microbial drug resistance	Switzerland Thailand France	354.628€
ARC	Strengthening rice breeding programs in Laos and Thailand and developing climate-resilient rice varieties	Adaptation/ Resilience of food production systems	Thailand 3x France Lao PDR 2x	141.102€
CAREChild	Containment of antibiotic resistance - measures to improve antibiotic use in pregnancy, childbirth and children	Anti-microbial drug resistance	Sweden Vietnam Lao PDR Vietnam	307.000€

DeZi	A single component pentavalent Dengue- Zika vaccine preventing antibody-dependent enhancement phenomenon	Emerging infectious diseases	France 2x Thailand, Cambodia	276.600€
RESCuE	Monitoring and optimizing the design quality of mangrove restoration towards a sustainable coastal ecosystem management in Thailand and Mekong delta of Vietnam	Impacts of Climate Change on Ecosystems/ Biodiversity	France Germany Thailand 2x, Vietnam	245.022€
Overall				2,7 Mio €

PROJECT INFORMATION

CWSSEA

This project will study the effects of climatic water stress on mature and secondary forests in Southeast Asia.

Activities

The CWSSEA project will study the functioning of tropical forests, particularly secondary forests in Thailand, and assess how they will respond to climatic water stress and the potential impacts of future climate scenarios in these ecosystems.

This information will then assist in creating model predictions on the long-term scenarios of climate change impacts on forest ecosystem services, and influence future global policies to combat climate change.

The CWSSEA partners are:

- Chulalongkorn University, Bangkok, Thailand, www.chula.ac.th
- Kasetsart University, Bangkok, Thailand, www.ku.ac.th
- National Science and Technology Development Agency, Pathum Thani, Thailand, www.nstda.
 or.th
- Swedish University of Agricultural Sciences, Umeå, Sweden, www.slu.se
- Bordeaux Sciences Agro, Bordeaux, France, www.agro-bordeaux.fr

Contact:

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SKUD

The SKUD project aims to study the emergence of diseases, especially SKUDs, in edible sea cucumbers outside Madagascar, including Thailand and France, within a global change framework.

Activities

The team will make a survey of parasites and diseases of two edible sea cucumbers and will then determine the cause(s) of SKUDs on these species.

The team will then assess the effects of increased temperature and decreased pH, at values commensurate with predicted global changes, on SKUD prevalence and development.

The SKUD partners are:

- Igor EECKHAUT/ University of Mons (Belgium)
- Anchana PRATHEP / Prince of Songkla University (Thailand)
- Philippe DUBOIS / Free University of Brussels (Belgium)
- Nadia AMEZIANE / Muséum National d'Histoire Naturelle, Station de Biologie Marine de Concarneau (France)

Contact:

Igor Eeckhaut: Igor.Eeckhaut@umons.ac.be

ThaiVacc

This project aims to develop Novel Leptospirosis and Dengue Fever Vaccines for Thailand.

Activities

The project will be focused on the following activities:

- Investigating the use of adjuvant systems to enhance the immunogenic properties of new vaccines for leptospirosis and suitable tetravalent DNA vaccine for dengue fever to allow higher immunogenicity and enhanced protection.
- Developing new oral vaccination approaches against leptospirosis and dengue, which combine M-cell targeting strategies and specific mucosal adjuvants.
- Organizing a workshop on mucosal vaccination in Chulalongkorn University, with the collaboration of Swiss and French partners.

The ThaiVacc partners are:

- Chula Vaccine Research Center (Chula VRC), Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand, http://www.chulavrc.org
- University of Lausanne (UNIL), Lausanne, Switzerland, http://www.unil.ch/index.html
- University of Geneva (UNIGE), Geneva, Switzerland, https://www.unige.ch/
- Université Jean Monnet Saint-Etienne (UJM), Saint-Etienne, France, https://www.univ-st-etienne.
 fr/fr/index.html

Contact:

Assoc. Prof. Dr. Kanitha Patarakul, MD, PhD: Kanitha.Pa@chula.ac.th





FRESHBIO

This project will study the diversity, biological states and uses of freshwater biotas in the insular biodiversity hotspots of Southeast Asia.

Activities

The project will support DNA barcoding campaigns to build-up reference libraries for use in automated species identification and environmental DNA barcoding. They will then explore historical trends in population

demography and species aggregation in ecological communities to address the state of aquatic biotas, and estimate the impact of land conversion on diversity patterns. Finally, the project will explore the dynamics of adaptation and resilience of human populations to environmental changes.

The FRESHBIO partners are:

- Dr. Hendrik FREITAG: Ateneo de Manila University (ADMU)
- Dr. Daisy WOWOR: Indonesian Institute of Sciences (LIPI)
- Dr. Nicolas HUBERT: Institut de Recherche pour le Développement (IRD), France Sud
- Dr. Thomas von RINTELEN: Museum für Naturkunde (MfN)
- Dr. Philippe KEITH: Muséum National d'Histoire Naturelle (MNHN)
- Dr. Edmond DOUNIAS: Institut de Recherche pour le Développement (IRD), Indonésie

Contact:

Nicolas Hubert: Nicolas.hubert@ird.fr

PlasmID-SEA

This project will use smartphone-based microscopy to study antibiotic resistance.

Activities

The PlasmID-SEA team will use a modern technique, based on optical DNA mapping, to analyse single plasmids through smartphone-based microscopy. The assay will then be transferred to a smartphone-based instrument, thus guaranteeing its long-term sustainable use in the region.

The PlasmID-SEA partners are:

- Chalmers University of Technology, Gothenburg, Sweden
 https://www.chalmers.se/en (Project coordinator)
- Siriraj Hospital, Mahidol University, Bangkok, Thailand; http://www2.si.mahidol.ac.th/en/ departments/
- University of Health Sciences, Vientiane, Laos; http://www.uhs.edu.la/
- Vietnam National Children's Hospital, Hanoi, Vietnam (external partner); http:// benhviennhitrunguong.org.vn/
- Karolinska University Hospital, Stockholm, Sweden https://www.karolinska.se/en

Contact:

Fredrik Westerlund: fredrikw@chalmers.se





FarmResist

This project studies the occupational risks for animal farmers to be colonised with animal-associated resistant bacteria, impact on the faecal microbiota.

Activities

The FarmResist project will use a "One Health" approach, to investigate the risk for pig and poultry farmers of of catching animal-associated ESBL-E and colistin-resistant enterobacteria. It is hoped that this research

will lead to preventive measures for avoiding the transmission of zoonotic bacteria from animal to farmers, as well as reducing the spread of antibioresistance in the environment.

The FarmResist partners are:

- Visanu Thamlikitkul, Siriraj Hospital, Mahidol University.
- Pariwat Poolperm, Kasetsart University, Bangkok, Dpt of Farm Resources and Production Medecine.
- Suwit Chotinun, Chiang Mai University, poultry clinic.
- Morand Serge, Kasetsart University, Bangkok, Faculty Veterinary Technology
- Jean-Marc Rolain, URMITE- IHU Méditerranée Infection, Valorization and Transfer, Marseille, France
- Morand Serge, CNRS- Cirad, France
- Markus Hilty, IFIK, Bern University, Switzerland
- Oppliger Anne, IST, Lausanne University, Switzerland

Contact:

Anne Oppliger: Anne.Oppliger@hospvd.ch

ARC

This project aims to strengthen rice breeding programs in Laos and Thailand and develop climate-resilient rice varieties.

Activities

The project will use a varietal improvement process based on the most advanced knowledge of traits which are affected by climate change, such as high temperatures and use proven methods of marker-assisted selection

on a state of the art breeding data- management system. It will also make use of complementary experimental facilities, including field and greenhouse phenotyping facilities in NAFRI/BIOTEC, respectively, growth chamber facility mimicking high temperature at CIRAD, and molecular marker lab at BIOTEC.

The ARC project partners are:

- Rice Gene Discovery Unit, BIOTEC, NSTDA, Pathumthani, Thailand; http://www.biotec.or.th. en (Project Coordinator)
- Agriculture Research Center (ARC), National Agriculture and Forestry Research Institute (NAFRI), Vientiane, Laos ; www.nafri.org.la
- CIRAD, Montpellier, France; https://www.cirad.fr

Contact:

Jonaliza L. Siangliw: jonaliza.sia@biotec.or.th



CAREChild

The CAREChild project aims to understand and improve antibiotic use in relation to pregnancy, childbirth and children in Lao PDR with the long-term aim of containing antibiotic resistance.

Activities

The team will explore and assess perceptions, knowledge, attitudes and reported practice as well as actual practice among health care providers

and in the community, to estimate antibiotic prescribing to estimate the situation of antibiotic resistance, focusing particularly on ESBLs in Escherichia coli in infections and carriage in faecal samples.

The CAREChild partners are:

- Karolinska Institutet
- Ministry of Health, Department of Food and Drugs, Vientiane Laos
- University of Health Sciences, Vientiane Laos
- National Institute of Public Health, Vientiane Laos
- Health Department of Vientiane Capital, Vientiane Laos
- Hanoi Medical University, Hanoi, Vietnam
- Hanoi University of Pharmacy, Hanoi, Vietnam

Contact:

Cecilia Stålsby Lundborg: Cecilia.Stalsby.Lundborg@ki.se

DeZi

This project aims to produce a single component pentavalent Dengue-Zika vaccine preventing antibody-dependent enhancement phenomenon.

Activities

The DeZi project team hopes to addresses the bottleneck of flavivirus vaccine development starting from the hypothesis that these vaccines should be based on an integrative approach by studying cross-reactivity among flaviviruses.

To do this, the project team will firstly transfer

technology of DNA vaccine production from France to Thailand. Once in place, they will aim to demonstrate that their vaccine protects against dengue virus.

The DeZi partners are:

- Bionet Asia, Bangkok, Thailand, http://www.bionet-asia.com
- Institut Pasteur Cambodia, Phnom Pehn, Cambodia, http://www.pasteur-kh.org
- Institut Pasteur, Paris, France, https://www.pasteur.fr/fr
- InCellArt, Nantes, France, http://www.incellart.com

Contact:

Anavaj Sakuntabhai: anavaj@pasteur.fr





RESCuE

The project will undertake monitoring and restoration for sustainable coastal ecosystems.

Activities

The RESCuE project will work to mitigate mangrove forest loss and degradation in Thailand and Vietnam. It will do this by developing databases to understand, conserve and rehabilitate mangrove areas.



The team will then work with local communities to identify areas which are suitable for replanting mangroves, and hold trainings and workshops for local practitioners to ensure that the coastal ecosystem management in Thailand and Mekong delta of Vietnam remain sustainable in the future.

The RESCuE partners are:

- CIRAD, UPR Forests and Societies (F&S), Montpellier, France (https://www.cirad.fr/en) (Project coordinator)
- LETG Rennes COSTEL, France (https://www.univ-rennes2.fr/letg-rennes-costel)
- European Commission, Joint Research Centre, Ispra (VA), Italy (https://ec.europa.eu/jrc/en/ about/jrc-site/ispra)
- Technische Universität Dresden, Faculty of Environmental Sciences Tharandt, Germany (https://tu-dresden.de/?set_language=en)
- X-ability Co. Ltd, Tokyo, Japan (http://x-ability.co.jp/en/index.php)
- The Joint Graduate School of Energy and Environment, King Mongkut's University of Technology, Bangkok, Thailand (http://www.jgsee.kmutt.ac.th/v2/index2.php)
- Department of Silviculture, Faculty of Forestry, Kasetsart University, Bangkok, Thailand(http://www.forest.ku.ac.th/forestry/en/index_en.php)
- Department of Land Resource, College of Environment and Natural Resources, Can Tho university, Vietnam (https://cenres.ctu.edu.vn/en/)
- Royal Forest Department, Bangkok, Thailand

Contact:

Prof. Valery Gond (valery.gond@cirad.fr)

FIND OUT MORE

For more information on all projects funded under the 1st Call of the Southeast Asia-Europe Joint Funding Scheme for Research and Innovation, please visit:

https://www.sea-eu-jfs.eu/funded-projects

GET IN TOUCH

Website: <u>www.sea-eu-jfs.eu</u> Facebook: <u>https://www.facebook.com/SEAEUJFS</u> Twitter: @SEAEUJFS

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