

**e-ASIA Joint Research Program (e-ASIA JRP)**  
**Joint Research Project in the field of “Agriculture (Food)”**  
**on the topic of “Conservation, Improvement and Utilization of Animal Genetic**  
**Resources in Asia”.**

It is our great pleasure to announce the selected projects of the e-ASIA Joint Research Program (e-ASIA JRP)\*<sup>1</sup> 8<sup>th</sup> Call for Proposals in the field of “Agriculture” on the topic of “Conservation, Improvement and Utilization of Animal Genetic Resources in Asia”.

A total of 7 proposals was submitted in response to the 8<sup>th</sup> joint call for proposals. After careful consideration based on the peer review results by the 8 funding organizations from 8 countries participating in the call\*<sup>2</sup>, the following 3 collaborative projects were selected for support with the approval of the e-ASIA JRP Board. Support to the projects will continue for three years.

**“Assessment on Genetic Diversity and Reproductive Biology of Carangid Fishes for Sustainable Use and Conservation”**

to be conducted jointly by:

Thailand: Uthairat Na-Nakorn, Professor, Kasetsart University

Sri Lanka: Dona Hemali Nandana Munasinghe, Professor, University of Ruhuna

Japan: Masamichi Nakajima, Associate Professor, Tohoku University

Philippines: Brian Santos, Assistant Professor, University of the Philippines

This cooperative research project aims to study genetic diversity and reproductive biology of two marine fish species, Golden trevally (*Gnathanodon speciosus*) and Giant trevally (*Caranx ignobilis*) which are important and heavily harvested food fish. The spatial genetic diversity will provide information on genetic variation within and among stocks which is useful for conservation and utilization (i.e. as germplasm for genetic improvement). Reproductive biology information is essential for future studies on captive breeding.

**“Preservation of endangered avian genetic resources through induced pluripotent stem cell (iPSC) derivation”**

to be conducted jointly by:

Japan: Guojun SHENG, Professor, Kumamoto University

Russia: Oleg Gusev, Associate Professor, Kazan Federal University

Thailand: Sittipon Intarapat, Lecturer, Mahidol University

This cooperative research project aims to use stem cell biology technology to preserve two endangered Gallinaceous birds: the green peafowl (*Pavo muticus*) and purebred red jungle fowl (*Gallus gallus*). According to IUCN, 11% of Galliformes are endangered, higher than the avian average of 4.5%. This project will take advantage of cutting-edge research breakthroughs to spearhead avian genetic resource preservation.

**“Gene evolution and taxonomic relationships of the *Apis cerana* subspecies of Russia, Korea, Vietnam and Indonesia”**

to be conducted jointly by:

Russia: Alexey Nikolenko, Professor, Institute of Biochemistry and Genetics of Ufa Federal Research Center, Russian Academy of Sciences

Vietnam: Pham Hong Thai, Professor, Vietnam National University of Agriculture

Indonesia: Rika Raffiudin, Senior Lecturer, IPB University

This cooperative research project aims to research gene evolution and taxonomic relationships of the *Apis cerana* subspecies of Russia, Korea, Vietnam and Indonesia. A phylogenetic analysis will be performed based on an analysis of the full mtDNA of the Korean, Vietnamese and Indonesian populations of *A. cerana*. Our results may be useful in explaining the origin, evolution of *A. cerana*.

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 the energy situation of the future.

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

Through the acceleration of science and technology research exchange and collaboration in the East Asian region, the e-ASIA Joint Research Program (e-ASIA JRP) aims to strengthen research and development capabilities towards resolution of shared challenges across the region, including those 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 implemented among 3 or more of its member countries. Through the implementation of joint research among participating countries in agreed fields of research, it is the goal of the e-ASIA JRP to contribute to economic and human resource development, as well as 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 8<sup>th</sup> joint call for proposals in the field of “Agriculture”:

- Ministry of Research and Technology/ National Research and Innovation Agency (RISTEK/BRIN), Indonesia

URL: <https://international.ristekdikti.go.id/>

- Japan Science and Technology Agency (JST), Japan

URL: <http://www.jst.go.jp/EN/index.html>

- Ministry of Science and Technology (MOST), Lao PDR

URL: <https://www.most.gov.la/index.php/en>

- Department of Science and Technology (DOST-PCAARRD), Philippines  
URL: <http://www.pcaarrd.dost.gov.ph/>
- Russian Foundation for Basic Research (RFBR), Russia  
URL: <http://www.rfbr.ru/rffi/eng/>
- Thailand Science, Research and Innovation (TSRI), Thailand  
URL: <https://www.nstda.or.th/en/index.php>  
Support of the selected projects is taken over by National Research Council of Thailand (NRCT), Thailand
- Ministry of Science and Technology (MOST), Vietnam  
URL: <https://www.most.gov.vn/en/Pages/home.aspx>
- National Science Foundation (NSF), Sri Lanka  
URL: <http://www.nsf.ac.lk/>

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