# Public call for collaborative research for fiscal year 2017 (Embryonic and Genetic Engineering)

Since having been recognized as a Joint Usage/Research Center for the Multi-Stratified Host Defense System on April 1, 2010, the Medical Institute of Bioregulation, Kyushu University has been promoting collaborative research with researchers involved in host-defense studies. We have established two projects: (1) an instrument usage type project in which collaborative research is conducted using the multi-stratified levels of research facility infrastructure and the technology of this institute (a maximum budget of 500,000 yen, including travel and accommodation expenses, is distributed); and (2) a collaborative research type project (travel and accommodation expenses only) that aim at clarifying the host-defense system using the knowledge accumulated about host defense in this institute. We publicly call for research proposals for fiscal year 2017.

# 1. Field of research: Embryonic and Genetic Engineering

We plan to conduct collaborative research on the elucidation of host-defense mechanism at an individual level by developing genetically modified mice as well as developmental engineering methods using mice, and the development of new therapies for diseases caused by the breakdown of the host-defense mechanism.

We can provide the following technological support regarding developmental engineering experiments: ES injection into blastocysts, DNA injection (including Crispr/Cas9) into fertilized eggs, in vitro fertilization/preparation of frozen fertilized eggs, etc.

Service	Reception	Comments
ES cell injection	1 to 2 days per week (Tue, Wed, Thu, Fri)	Use of C57BL/6J mice
DNA injection	1 to 2 days per week (Tue, Thu)	Use of C57BL/6J mice
Preparation of frozen fertilized egg	Arbitrary	Embryo freezing via in vitro fertilization (IVF); cleaning of mice
Bringing in frozen fertilized egg	Arbitrary	Thawing/transplantation of frozen embryo from other institutions; aim of transfer
Carrying out/thawing frozen fertilized egg	Arbitrary	Thawing/transplantation of frozen embryo, transporting frozen embryo
Preparation of frozen sperm	Arbitrary	Preparation and preservation of frozen sperm

# 2. Qualification of applicants

Researchers belonging to universities, national or public institutions, or equivalent institutions

#### 3. Period of research

From April 1, 2017 to March 31, 2018

#### 4. How to apply

Required Documents: Prescribed application form (1 original and 1 copy).

The application form is downloadable at http://www.bioreg.kyushu-u.ac.jp.

Please fill out the application form and send it to the address below by post or e-mail. Please discuss the contents with the facilitator of the institute before sending in your completed application form

Application deadline: Friday, February 24, 2017.

Send to: Yoichiro Shibata / Miho Ohta(contact person)

General Affairs Section, Academic Research Cooperation Division, Administrative Office (Medical Sciences, Dental Science and Pharmaceutical Sciences), Kyushu University

Address: 3-1-1, Maidashi, Higashi-ku, Fukuoka 812-8582, JAPAN

Mail: ijksomu@jimu.kyushu-u.ac.jp

Tel: +81-92-642-6672; Fax: +81-92-642-6776

# 5. Acceptance or rejection

Once the review committee has made a decision to either accept or reject the application, you will be informed of the result as soon as possible.

#### 6. Report of the results

Please submit a report describing the progress and results of the research once the study has been completed. If you have published a paper based on the results of the study, please acknowledge the facilities of our institute that you have used in the paper as follows:

"This work was partly performed in the Cooperative Research Project Program of the Medical Institute of Bioregulation, Kyushu University."

In addition, please submit a copy of the reprint of the paper.

#### 7. Others

- (1) Once a research theme has been chosen, the researcher responsible for the experiment must become a collaborator of the Medical Institute of Bioregulation. The researcher who wishes to receive reimbursement for travel expenses as a collaborator should answer "yes" to the "requirement of travel expense" in an application form.
- (2) If you wish to conduct an urgent experiment, we may accept your application even after the application deadline. Please contact Yoichiro Shibata / Miho Ohta(contact person), the General Affairs Section, Academic Research Cooperation Division, Administrative Office (Medical Sciences, Dental Science and Pharmaceutical Sciences), Kyushu University.

#### 8. Mandatory expenses

Research and travel expenses are provided, as per the budget. Travel expenses are also provided to research collaborators, as per the budget. Please contact the facilitator of the institute before beginning a collaborative research.

# 9. Handling of intellectual properties

Intellectual properties are handled in accordance with the Intellectual Property Handling Rules of Kyushu University.

# 10. Inquiries

• Regarding the application for collaborative research:

Yoichiro Shibata / Miho Ohta(contact person)

General Affairs Section, Academic Research Cooperation Division, Administrative Office (Medical Sciences, Dental Science and Pharmaceutical Sciences), Kyushu University

Mail: ijksomu@jimu.kyushu-u.ac.jp

Tel: +81-92-642-6672; Fax: +81-92-642-6776

• Inquiries about available instruments and technology:

Yusaku Nakabeppu (Professor)

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Mail: yusaku@bioreg.kyushu-u.ac.jp