Guidelines for Collaborative Research Project Application:
Institute for Molecular and Cellular Regulation (IMCR)
Joint/Usage Research Program for Endocrine/Metabolism (Fiscal Year 2021)
(Additional open call for participants)

1. OVERVIEW

Institute for Molecular and Cellular Regulation, Gunma University has accumulated various results and bioresources as well as establishing new analysis techniques through the implementation of the research projects of the 21st Century Center of Excellence (COE) program, Global COE program, and the Joint Usage/Research Center for Endocrine/Metabolism.

With the 3rd term approval as a Joint Usage/Research Center in FY 2016, our institute widely accepts collaborative researches using our analysis techniques and bioresources, in order to play the central role of this field and promote further development of the researches.

IMCR, therefore, calls for collaborative research projects that are carried out by researchers from other institutes with investigators in IMCR using the most advanced equipment and resources.

IMCR's collaborative projects would be in the two main fields of our research as stated below, however, we will accept proposals of broad research interests for elucidating the critical issues beyond the bounds of these categories. For instance, the insufficiency of central nervous system and immune system as well as metabolic organs such as liver, skeletal muscle, adipose tissue and pancreas is considered to cause metabolic syndrome such as obesity, diabetes, hypertension and hyperlipidemia. Therefore, not only research on a single organ or individual cell but comprehensive approaches to investigate the regulations of multiple organs and inter-organ associations are critical for elucidating the mechanisms of metabolic syndrome development.

2. Collaborative Research Projects

Projects on genetic and epigenetic research on the development of metabolic diseases:

◇ Genetic and epigenetic approaches for elucidating the mechanisms of energy metabolism and metabolic diseases.

◇ Establishment of transcriptome database of metabolic diseases and the following data mining.

◇ Establishing genetically modified animals using CRISPR/Cas9 system and following genetic and epigenetic analysis.

Projects on metabolic signaling:

◇ Investigating the molecular and cellular mechanisms which will cause metabolic and

endocrine diseases and their related diseases.

◇ Translational researches on lifestyle-related diseases using either our imaging systems, assay systems of metabolic functions, the direct delivery system of drugs or genes into murine central nervous system, or animal models of endocrine and metabolic diseases.

3. ELIGIBILITY FOR APPLICANTS

The applicant must be a researcher at a university or a public research institute and must hold an academic degree comparable to a doctorate (Ph.D. or equivalent), or must have attained an equivalent academic qualification via research and academic publications.

*Graduate and undergraduate students are NOT eligible to apply, but are eligible to participate as collaborators to their supervisors.

The students involved in this collaborative research activity are required to be covered by insurance such as “Personal accident insurance for student pursuing education and researching”.

Undergraduate students, in particular, must carry out experiments under the supervision of the faculty members including the assistant professors or higher in rank of the institutions that the students belong to, or under the supervision of the IMCR’s researchers that the students collaborate with.

The supported period of the program is 1 fiscal year. (refer to 4) The applicant is able to apply for an extension, but the supported period of the project which was adopted by the same laboratory cannot exceed 3 years in a row for the purpose of promoting new challenges of this field. The researcher accomplished to publish at least one manuscript as a consequence of the three consecutive seasons of this Joint Research Program will be eligible for another application after one year interval, and can apply for new projects up to 3 years. (A researcher may apply any number of times provided that the researcher produces results such as publishing a paper. The previous achievements of this collaborative research project will be evaluated.)

4. PERIOD OF THE PROGRAM

Supported period: July 1st, 2021 to March 31st, 2022

5. APPLICATION PROCEDURE

(1) Each principal applicant may submit 1 research project per 1 fiscal year (only 1 applicant from the same laboratory is eligible). The project is required to be based on the outcome of the last fiscal year when the applicant applies for an extension of the supported period of the project. (The supported period cannot exceed 3 fiscal years including the adopted years.)

(2) The applicant must submit “Application Form (Form 1)” and “Written Consent (Form 2)” to

IMCR General Affairs Section by the deadline given below. Before submission of the required forms, the applicant must check their eligibility and obtain consent from the prospective collaborative researcher of IMCR.
The required forms can be downloaded from the website of the Joint Usage/Research Center.
Form 2 (Written consent) requires a signature and a stamp of the dean of the department or of the head of the institute to which the applicant belongs.
If the applicant belongs to multiple affiliations, the written consents issued by each affiliation are required
Please write down “Application Forms of the Joint Usage/Research Center enclosed” on the envelope.
For more information about our laboratories, researchers, and research outlines, please visit IMCR’s website. (https://www.imcr.gunma-u.ac.jp/?post_type=organization)

(3)Application Deadline

May 10th, 2021 (no later than May 10th, 2021 JAPAN TIME)

Late submission due to the discussion with the researcher of IMCR will be taken into consideration if it is reported in advance by the researcher of IMCR.

(4)Where to Apply

Institute for Molecular and Cellular Regulation, Gunma University
3-39-15 Showa-machi, Maebashi, Gunma, 371-8512, Japan

6. NUMBER OF ADOPTION

The maximum number of adoption will be approximately 8. The research projects given below will be adopted as the priority projects.

(3) Research projects by foreign researchers

7. SELECTION AND NOTIFICATION

Applicants shall be screened by the collaborative research committee including external advisory members and will be notified of the results and the amount of the research fund by the end of June, 2021.

8. RESEARCH FUND

IMCR will provide the project with the research expenses (supplies and travel expenses) that shall be used for Joint Research Program as stated below. The number of adoption and the allocation amount is adjusted due to budget constraints.

Division	Research Project	Expected number of adoption	Amount of research fund (limited)
General Research projects	Projects on medical genomics and metabolism or metabolic signal research	Approximately 8 projects	300,000JPY
Priority Project	Projects by foreign researchers		*400,000 JPY

*Note: Additionally, the travel expenses for the collaborative research meeting on “Projects by foreign researchers” is to be provided ONLY ONE TIME from other budget.

(1) Travel Expenses

Travel expenses, a daily allowance and accommodation charges shall be paid to those persons who comply with a request to be present in Collaborative investigation meeting at Institute for Molecular and Cellular Regulation Gunma University.

Note 1: Economy class tickets are to be supported. If you fly more expensive class than economy class, please turn in the documents that certify the economy-class fare of your flight.

Note 2: Please contact beforehand with the researcher in charge in IMCR in your collaborative research for the travel fare when you plan to travel to IMCR.

(2) Supplies Expenses

Purchase of expendable supplies shall be covered in order to achieve the issues in the application form for the Institute for Molecular and Cellular Regulation Joint/Usage Research Program for Endocrine/Metabolism. Purchase of equipment shall not be covered.

9. USE OF FACILITIES

Successful applicants are allowed to use our resources including experimental devices, antibodies, cell-lines, and genetically modified biological models including mouse, fish, nematode, and yeast generally freely but under the instruction of the collaborative researchers of IMCR.

Furthermore, IMCR is surrounded by Bio Resource Center, Radioisotope Research Building, Laboratory for Analytical Instruments, and Branch Library of Medicine. The collaborative researchers are eligible to use them under the same conditions as the researchers of Gunma University

（Reference）

Research resources of IMCR：https://www.imcr.gunma-u.ac.jp/?page_id=331&lan=en

Bio Resource Center ：http://doujitsu.dept.med.gunma-u.ac.jp/cms/?page_id=377

Branch Library of Medicine ：https://www.media.gunma-u.ac.jp/en/

10. ANNUAL REPORT SUBMISSION

It is expected that successful applicants will submit an annual progress report for each project by e-mail to IMCR within 1 month after the expiry date of the supported period described in"4". The submitted report will be published on the web site of IMCR, as the outcome of Joint/Usage Research Program for Endocrine/Metabolism.

11. ATTENTION WHEN SUBMITTING A SCIENTIFIC PAPER

When a scientific paper is to be published by the support of this project, it should contain the research number stated on the notification of acceptance issued by IMCR and an acknowledgment of the project's support:" This work was carried out by the joint research program of the Institute for Molecular and Cellular Regulation, Gunma University."

And also please submit one paper reprints of each publication to IMCR. (refer to 5. (4)).

12. INTELLECTUAL PROPERTY RIGHT

In principle, the attribution of intellectual property rights should be determined by consultation between the applicant and his/her collaborator of IMCR.

13. SECURITY EXPORT CONTROL

Regarding provision of research equipment, materials and technical instruction, or collaborative research activities with foreign researchers, the procedures based on the security export control of Gunma University may be required in compliance with the relevant laws in Japan.

14. CONTACT

For further information related to the IMCR program, please contact:

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