Application Guidelines for the Cooperative Research Program in 2021

The Primate Research Institute (PRI) is recruiting researchers for the Cooperative Research Program in 2021. See details below.

1. Eligibility Requirements for Applicants

Researchers, graduate students (including senior year undergraduate students who will proceed to graduate school) with Institute/University affiliations or equivalent as of April 1, 2021. Applications from graduate students are encouraged.

2. Research Program Period

April 1, 2021 - March 31, 2022

3. Research Projects

There are three categories of research projects. Please refer to page 6 and 7 for further details.

- A: Planned Research Projects
- **B: Individual Research Projects**
- **C: Continuously Accepted Research Projects**

• In principle, PRI aims to recruit projects that use resources at PRI or involve experiments and observations at our facilities. However, projects involving fieldwork outside of PRI will be considered.

• Applications from overseas researchers who wish to conduct research overseas only are not permitted.

4. Application Documents

Applicants should download the specified documents and submit your application from our website below.

http://www.pri.kyoto-u.ac.jp/sections/cooperative_research/en/index.html

5. Application Deadline

Friday, January 15, 2021

*Except for applicants to type C (Continuously Accepted Research Projects) who wish to begin their research after April 2021.

6. Research Allotment

All category allotments will consist of 1 principal researcher and supporting (collaborating) researchers (if needed).

7. Number of Applications

Applications are made for one project for one person.

8. The Prospective Host (Corresponding) Researcher at PRI

Please contact the prospective host (corresponding) researcher at PRI in advance to apply for the expected research program and facilitate commencement of the research activity. For contact details, please refer to the PRI web site.

If you are unsure about your research area at PRI, you need to contact the Cooperative Research Section in PRI. The section will intermediate for you and the prospective host (corresponding) researcher at PRI.

9. Results

Selection will be done by the Cooperative Research Advisory Committee. We will contact successful applicants after decisions are made by the Center Management Committee. You will be notified about the results of your application sometime in late March 2021.

10. Graduate students, post-doctoral researchers or the equivalent

You must obtain your supervisor's consent and confirm your effort rate if you apply as a principle researcher. We may contact your supervisor for confirmation.

This program should be carried out under a framework of being monitored by a supervisor, host researcher or relevant staff member. A research representative or a supervisor should be held responsible for any unforeseen accidents. A supervisor must take all possible precautions to ensure the safety of students involved in the research.

11. Requirements after Selection

If your research contains any animal experiments or recombinant DNA experiment, an approval from your institute is necessary. You may be required to submit IOU, MTA and Health Certification after acceptance. You will be informed of the details by your host (corresponding) researcher at PRI.

12. Contact to Current Institution

It is the responsibility of the applicant or host (corresponding) researcher to inform the applicant's current institution regarding commencement of the research project in advance.

13. Reports

The principal researchers of adopted projects must submit a "Results Reports" upon completion of the research period. In addition, you must acknowledge the Cooperative Research Program in your presentations and publications. When you publish a paper that is derived from the Cooperative Research Program in a peer-reviewed journal or as a presentation at a scientific congress, you must inform to PRI online and include a description of the Cooperative Research Program on your presentation and publications as the achievement of the Cooperative Research Program. Refer to an e-mail that informs you about how to upload them. If you have changed your affiliation and e-mail address since the last time you were adopted in this program, please inform us. **If a project of yours has been adopted in the past and you are applying again this**

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year, your publication results (as of the application date of January 15, 2021) will be considered during the selection process.

14. Information Disclosure Request

The collected applications may be open to the public, with the exception of identifiable information. Please specify any information that you wish to be kept private by underlining the text in the application. This will be considered at the time of publication.

15. Handling Personal Information

Submitted personal information for this project will be protected in conformity with Kyoto University's Privacy Policy.

Kyoto University's Privacy Policy; <u>http://www.kyoto-u.ac.jp/ja/privacy_policy</u> The Rule of Individual Information Protection on Kyoto University <u>http://www.kyoto-u.ac.jp/uni_int/kitei/reiki_honbun/aw00209631.html</u>

16. Accommodations

PRI accommodation is available. For reservations, ask your host (corresponding) researcher at PRI.

17. Insurance

We recommend that you procure accident insurance, etc., independently before starting your Cooperative Research Program at or with PRI. Kyoto University has general insurance for national university corporations. However, this insurance does not cover any accidents which happen during the cooperative research for which Kyoto University has no legal responsibility.

18. Further Information / Inquiries

The Cooperative Research Section in PRI Email: pri-kyodo@mail2.adm.kyoto-u.ac.jp

Introduction to the Cooperative Research Program

1. Research category and screening

The Cooperative Research Program consists of A: "Planned Research Projects", B: "Individual Research Projects" and C: "Continuously Accepted Research Projects". As this is one of the program of the Joint Usage / Research Center, the Cooperative Research Advisory Committee which consists of PRI faculty members and non-PRI faculty members will screen the submitted applications and the Center Management Committee will make the final decision.

You are permitted to apply for the same project as that conducted in the previous year. In such a case, however, you are required to explain the progress of the project and the reason why you need to continue the project in the application. It will be considered during the selection process.

In addition, for young researchers (i.e. those for which fewer than 8 years has passed since obtaining a doctoral, master's, or Bachelor's degree), additional consideration will be given concerning acceptance and budget allocation.

2. Guidelines

At PRI, all adopted research projects are bound by the rules of the "Guide for the Care and Use of Laboratory Primates" and of the "Guidelines for the Study of Wild Primates and the Introduction of Wild-born Primates for Research" from the standpoint of animal welfare and wildlife conservation for handling primates. Thus, we accept only research projects that follow the above-mentioned guidelines.

3. Animal Experiments

Before you apply for the Cooperative Research Program, you must fully consult with the prospective host (corresponding) researcher at PRI and submit an Animal Experiment Plan, which is to be approved by the institution of the applicant. Please refer to the PRI webpage about these guidelines in advance.

4. Primate Experiments outside of PRI

If a primate experiment needs a special experimental equipment or facility, you are allowed to move primates bred at PRI to the necessary location outside of PRI and experiment therein. You must submit an Application for Primate Experiments at Facility Outside of PRI in addition to the Animal Experiment Plan.

5. License

In case of experimentation with and observation of animals at PRI, all researchers are required to obtain an animal handling license depending on the level of invasiveness of the research before commencement of the project. The researchers are also recommended to attend educational training regarding animal experimentation at their current institutions. If you did not undertake such training at your institution before arrival at PRI, you are required to take Kyoto University's educational training thereafter. A license valid for three years will be provided only after attending lectures and practical training for animal handling. Concerning studies of animals, it is essential to submit a photocopy of your negative results of the Certification of Tuberculin Test after project adoption.

6. Field Research

In case of field research involving with wildlife animals, you must fully consult with the prospective host (corresponding) researcher at PRI and submit the Application for Field Research Permission before you apply for the Cooperative Research Program.

7. Compliance

Following project adoption, if the applicant fails to comply with the guidelines set by PRI or Kyoto University, he or she may be imposed a penalty, including the possible withdrawal of eligibility.

8. Use of Research Expenses

We have strict regulations regarding the use of research funds (e.g. you will be required to post a postcard from a travel destination to certify that you are following your proposed schedule). Violation of regulations is subject to research cancellation and withdrawal of PRI research eligibility. The details are to be informed at the time of adoption.

9. Goods not permitted under the allotted research expenses

The purchase of cashable goods (PC, tablet PC, digital camera, video camera, TV, recorder) is not allowed when using the research expenses provided by the Cooperative Research Program.

10. Change of the Principle Researcher

Following project adoption, if the applicant would like to change the principle researcher due to unavoidable reasons, submit an "Application for Change of Principle Researcher". You are allowed to change the principle researcher in case the prospective principle researcher is the supporting (collaborating) researcher and has a qualification of the Cooperative Research. You cannont change the research content. The Cooperative Research Advisory Committee will screen the application and the Center Management Committee will make the final decision.

If the change of the principle researcher is not permitted, he / she should withdraw and submit a Results Report upon termination.

11. Intellectual property

The results of the Cooperative Research Program are subject to "Kyoto University's intellectual property privacy policy". All inventions (patents, utility model rights, design rights, trademarks) stemming from research results will be handled under contractual agreement with Kyoto University.

See the following website for further information (Japanese only):

http://www.saci.kyoto-u.ac.jp/wp-content/uploads/2007/06/tizai_policy070628.pdf

Supplemental explanations on three research categories

Planned Research Projects

This cooperative research will be carried out under close collaboration with non-PRI researchers and PRI faculty members as promoters. Each project will in principle be maintained for 2 or 3 years, and the results will be compiled at the end of study period (even "Planned Research Projects" can be adopted as "Individual Research Projects" or "Continuously Accepted Research Projects" after discussion with the prospective host (corresponding) researcher).

The granted amount of the maximum of the research expense is 200,000 JPY and the amount of the research expense will be adjusted after the screening.

Summary of the assigned projects (in parentheses: the prospective host (corresponding) researcher; underlined: principal researcher)

•Elucidating the structure and function of neural networks in novel gene-manipulated primate models

[Prospective Schedule: 2020.4.1-2022.3.31]

(Masahiko Takada, Takao Oishi, Shigehiro Miyachi, Kenichi Inoue)

This research project aims at elucidating the structure and function of neural networks in nonhuman primate animals, such as macaques and marmosets, using novel gene-manipulated models that are produced by a variety of viral vector systems and optogenetic / chemogenetic techniques.

For inquiries: takada.masahiko.7x@kyoto-u.ac.jp

oAdvancing cellular and molecular research with primate-derived samples

[Prospective Schedule: 2020.4.1-2023.3.31]

(<u>Hiroo Imai</u>, Akihiko Koga, Munehiro Okamoto, Masanori Imamura, Hirofumi Akari) Thousands of primate samples are held at our institute. DNA, RNA, and cultured cells are used for advanced molecular biology studies. In this research project, we aim to build knowledge on advanced techniques to analyze these samples as well as share this information and these samples for further examination in the future.

For inquiries: imai.hiroo.5m@kyoto-u.ac.jp

Holistic Approaches to Cognitive Functions and Body Structures Supporting Communication in Primate Lineage

[Prospective Schedule: 2021.4.1-2024.3.31]

(Ikuma Adachi, Katsuki Nakamura, Takeshi Nishimura, Yuko Hattori)

This project encourages holistic approaches to studying the evolutionary origins of communication in the primate lineage. We especially focus on communication through auditory and visual channels, and promote research exploring cognitive mechanisms, body structures, and their interaction, which support such communication.

For inquiries: adachi.ikuma.2c@kyoto-u.ac.jp

Individual Research Projects

Aiming for a more complete development of primate research, we are recruiting under the project "Individual Research", which is based on an original study designed by applicants unrelated to the above "Planned Research Projects" ("Individual Research" can be adopted as "Continuously Accepted Research Projects" after discussion with your prospective host (corresponding) researcher).

The "Individual Research Projects" accept applications of long-term investigation, observation and experiments. Instead of the recent achievements, PRI puts emphasis on the necessity and the strength of the plan for research. If you would like us to evaluate your application from this point of view, clearly indicate on the "Purpose of the research project" of the application sheet that you are conducting long-term research, and describe the details of the long-term research as it relates to other elements in the proposal as well. You must apply each fiscal year even if your research is long-term, and your application will be screened each fiscal year independently. If you apply with the same project, describe the progress of the research.

The maximum research expenses that can be applied for is 200,000 JPY, and the amount of the research expenses allotted will be adjusted after screening.

Continuously Accepted Research Projects

Research facilities, subjects, data, and samples are all available at PRI. These facilities, subjects, data, and samples must be used appropriately. Books and journals are also available in our library.

Regarding the adoption of research in the middle of the year, as a rule, you are eligible to apply only for research in which multiple uses of your subject animals is possible. Please contact the prospective host (corresponding) researcher about this in advance.

Travel and research expenses will not be supported under this program category.

Screening items regarding feasibility of research plan

1. Screening

Five committees at PRI screen the feasibility in terms of facilities, equipment, materials and permissions. You are required to fill out some confirmation items and the progress of the application. If you do not fill out all of the required items, the screening may be delayed or not be done.

The Cooperative Research Advisory Committee will screen the necessity and the feasibility of the planned research after receiving comments from each committee at PRI.

You may need to modify your application if the committee requests it. For details, please contact your prospective host (corresponding) researcher at PRI.

2. Utilization of Collections and Sampling

In case of the use of the collection curated at PRI and samples provided (transferred or loaned) from breeding populations at PRI for the Cooperative Research Program, you are required to fill out the details of your research plan.

Here "materials" include: 1) bodily fluids (blood, saliva, and semen), 2) internal organs, 3) muscles, 4) hair, 5) teeth and bones, 6) excreta, 7) DNA and RNA, 8) others (materials to be approved by PRI).

The Study Material Committee at PRI screens the material transfer and the required procedures of your planned research.

Applicants must confirm their compliance with the terms and conditions stated below upon submission of their application. You may need an MTA or MOU depending on your research. For details, please contact your prospective (corresponding) researcher at PRI.

Regarding the handling of biological materials or samples from breeding/housed populations at the Primate Research Institute, Kyoto University, provided by the Cooperative Research Program:

- 1. Biological materials should be used for the Cooperative Research Program only and should not be used for any other purpose.
- 2. Commercial uses are prohibited.
- 3. Biological materials or samples are not authorized for reuse and cannot be given or loaned to third parties.
- 4. The recipient shall return all biological materials to PRI at the expiration of the program or dispose of them in an appropriate manner. For continuous use over a year, he/she must apply the Cooperative Research Program each year.
- 5. PRI accepts no liability for any outcome of the use of these biological materials.

3. Animal Experiment Plan

In the event of planned research involving animal experiments (including blood sampling), submission of the Kyoto University Animal Experiment Plan is required. The project must be admitted as a research project that conforms to the Guide for Care and Use of Nonhuman Primates.

The supervisor in charge of the experiment must be a faculty member at PRI. Therefore, please contact your prospective host (corresponding) researcher regarding application submission and detailed plans in advance of the planned experiment.

For the planned research, the Animal Experimentation Committee judges the reasonability of the

research methods, and the reasonability of management and handling after daily or experimental treatments. In conformity with fundamental principles, "Unless proven otherwise, any painful treatment for a human is treated as such for an animal as well". Appropriate methods with careful consideration of pain reduction are essential.

4. Primate Experiments at facilities outside of PRI

Your prospective host (corresponding) researcher needs to submit an "Application for Primate Experiments at Facility Outside of PRI" for you to get an approval.

5. Recombinant DNA or infectious agent

Your prospective host (corresponding) researcher needs to submit an "Application for recombinant DNA experiment" for you to get an approval for use recombinant DNA in PRI.

If you use infectious agents classified as BSL2 at PRI, your prospective host (corresponding) researcher must submit an "Application for Handling BSL2" to the Biosafety Committee at PRI and get an approval. Therefore, consult with your prospective host (corresponding) researcher in advance.

6. Field Research

In the event of planned research involving field research, you must comply with "Guidelines for the Study of Wild Primates and the Introduction of Wild-born Primates for Research". You also need to comply the guideline when you collect samples, capture animals and conduct invasive experiments. The Field Research Committee screens the research method and the reasonability of the planned research in order to achieve research purpose. You may need to modify your application sheet if the committee requests. For details, please contact your prospective host (corresponding) researcher at PRI.

7. Human Experimentation

In the event of planned research involving human experiment, you must submit "Application for Human Experimentation", understand the aim of protection of human rights mentioned in the "Declaration of Helsinki". Based on the "Act on the Protection of Personal Information held by Administrative Organs [Organizations]", your research should be permitted and admitted as safe and ethical research.

The person responsible for the research must be a faculty member at PRI. Therefore, please contact your prospective host (corresponding) researcher regarding application submission and detailed plans in advance of the planned experiment.

The Human Experimentation Ethics Committee at PRI screens the rationale and feasibility of the research methods.

8. Reference: Guidelines

Guideline for Care and Use of Nonhuman Primates (version 3)

http://www.pri.kyoto-u.ac.jp/research/sisin2010/Guidelines_for_Care_and_Use_of_Nonhuman_ Primates20100609.pdf Guidelines for the Study of Wild Primates and the Introduction of Wild-born Primates for Research https://www.pri.kyoto-u.ac.jp/research/guide-e2008.html Declaration of Helsinki http://www.med.or.jp/wma/helsinki.html Ethical Guideline for Medical and Health Research Involving Human Subjects(MEXT) http://www.lifescience.mext.go.jp/files/pdf/n1443_01.pdf Guidance for Ethical Guideline for Medical and Health Research Involving Human Subjects(MEXT) http://www.lifescience.mext.go.jp/files/pdf/n1500_02.pdf

Availability and Number of Primate Species

Information about the "availability and number of primate species" has been updated on the website of the Primate Research Institute. Please check the link below and make your research plan accordingly.

http://www.pri.kyoto-u.ac.jp/sections/cooperative_research/reiwa3/teikyo-e.pdf

Utilization of samples related to the National Bio Resource Project (NBRP)

NBRP Japanese Macaques are maintained at PRI. In addition, we accept sampling from zoos, etc., through the Great Ape Information Network (GAIN). If you want to sample from such resources, contact the office of the resource or the prospective host (corresponding) researcher of the cooperative research program, or the resource committee (<u>pri-shiryo@mail2.adm.kyoto-u.ac.jp</u>) to complete the necessary procedures (registration , applications, etc.) in advance of applying.

1.Japanese Macaques https://nbrp.jp/resource/japanese-macaques/Non-invasive resources (blood, feces, etc.) of PRI-born individuals may be available for a fee (amount to be determined).

2.Great Ape Information Network (GAIN) https://nbrp.jp/resource/gain/ Skeletal specimens and organs of apes that died at zoos, etc., may be used.