

### Handbook on the Grants-in-Aid for Scientific Research (KAKENHI) Program

How to Make More Effective Use of the Program
(For Researchers)

FY2023 Edition

### June 2023

Research Promotion Bureau, Ministry of Education, Culture, Sports, Science and Technology (MEXT)

Japan Society for the Promotion of Science (JSPS)

### **Preface**

This Handbook is intended mainly for researchers who are conducting research with financial assistance from the Grants-in-Aid for Scientific Research (KAKENHI) program or intend to apply for a research grant under the program. The basics of the program are outlined here in an accessible format.

Be sure to read through this Handbook in order to further your understanding of the program and to make more effective use of the funds provided under the framework of this program.

KAKENHI are funded by the tax of citizens and other public sources. Those conducting research under this program are expected to observe the rules established by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) and the Japan Society for the Promotion of Science (JSPS), as well as rules prescribed by each research institution, and to make proper and efficient use of the funds.

This English version is provided for convenience of KAKENHI grant recipients who experience difficulty in reading the Japanese original, which should be referred to, in case of dispute.

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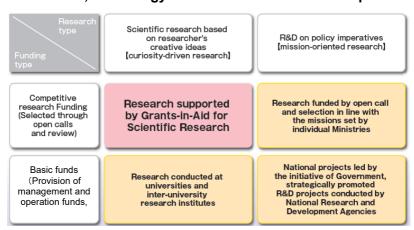
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# 1. What is the Grants-in-Aid for Scientific Research (KAKENHI) program?

The KAKENHI program is a competitive research funding program aimed at significantly developing all scientific research (i.e., research based on the free ideas of researchers in universities and other research institutions), from basic to applied research in all fields, covering the humanities, the social sciences and the natural sciences. The program is intended to provide financial support for creative and pioneering research projects following the peer review process.

### < The placement of "KAKENHI" in the policy on the promotion of science, technology and scientific research in Japan >



Research activities take many forms, including those in which the researchers carry out their work relatively freely and with curiosity, projects in which the area of concentration and goals are defined in advance, and those intended to lead to specific product development. The starting point for these activities is scientific research based on the researcher's creative ideas. By broadly supporting this scientific research, which is the foundation of all research activities, the KAKENHI program plays a major role, in the fostering and development of scientific advances.

### O Research Categories

Various research categories have been established based on the content and the scale of the research.

As of April, 2023

Research categories	Purposes and description of each research category	Type of fund <sup>(*1)</sup>
Grants-in-Aid for S	cientific Research	
Grant-in-Aid for Specially Promoted Research	Outstanding and distinctive research conducted by one or a relatively small number of researchers expected to achieve remarkably excellent research results that open up a new scientific field.  (3 to 5 years (In a truly necessary case, period up to 7 years is acceptable.); 200 million to 500 million yen per project (In a truly necessary case, applicants may apply for a budget exceeding 500 million yen is asked for.))	SG
Grant-in-Aid for Scientific Research on Innovative Areas	(Research in a proposed research area) This category is intended to foster novel research areas proposed by diverse groups of researchers that are expected to lead to development and heightening of Japan's research level in the respective fields, to be conducted by collective research efforts through collaboration, scholarly training, shared use of equipment, etc. (5 years; generally set between 10 million to 300 million yen per fiscal year per proposed area) [A call for proposals for budget for collecting research results of Finished Research Area only is put out in FY2023 and beyond.]	SG
Grant-in-Aid for Transformative Research Areas	<ul> <li>(A) Research areas proposed through co-creative and interdisciplinary efforts of diverse researchers, which aim to create research areas that will lead the way to radical transformation of and change in the existing framework and/or direction of research as well as upgrade and level-up of scientific research in Japan and nurturing of young researchers, and will contribute to the development of the proposed research areas through efforts for joint research and shared use of equipment, etc. (5 years; more than 50 million yen and up to 300 million yen per fiscal year per research area (In a truly necessary case, a budget exceeding 300 million yen may be requested.))</li> <li>(B) Research areas proposed by compact groups of researchers who will be bearers of the next generation of research with a smaller budget scale (about 3 or 4 groups), which aim to create research areas that will</li> </ul>	SG

lead the way to radical transformation of and change in the existing framework and/or direction of research as well as upgrade and level-up of scientific research in Japan through more challenging and exploratory research, and expected to lead to Transformative Research Areas (A) in the future. (3 years; 50 million yen or less per fiscal year per research area)		
Research project)	(S)	22
jointly by multiple researchers.	(A)	SG
(B) 3 to 5 years; 5 million to 20 million yen	(B)	
, and the second	(C)	MF
Grant-in-Aid for Challenging Research conducted by a single or multiple researcher that aims at radically transforming the existing research framework and/or changing the research direction and has a potential of rapid development.  The scope of the (Exploratory) category encompasses research proposals that are highly exploratory and/or are in their budding stages.  (Pioneering) 3 to 6 years; 5 million to 20 million yen (Exploratory) 2 to 3 years; 5 million yen or less	MF	
Grant-in-Aid for Early-Career Scientists  Research conducted by an individual researcher (*2) who is less than 8 years after Ph.D. acquisition. (2 to 5 years; up to 5 million yen per project)	MF	
Grant-in-Aid for Research conducted by a single researcher who has been freshly appointed to a research position, or who has returned from his/her maternity, childcare or other kinds of leave.  (1 to2 years; up to 1.5 million per fiscal year)	MF	
Grant-in-Aid for Encouragement of Scientists  Individuals who belong to educational or research institutions, private companies, etc. and engage in the researches to contribute to the promotion of the science.  (1 year; 100 thousand to 1 million yen per project)	SG	
Grant-in-Aid for Special Purposes Research projects of pressing urgency and importance.	MF	
Grant-in-Aid for Publication of Scientific Research Results		
Publication of Research Results  Subsidy for publication and/or international dissemination of research achievements of high academic values executed by academic societies and other organizations.		
Enhancement of International Dissemination of Information  Of Information  Enhancement of International dissemination of academic information for the purpose of international academic exchange.		
Scientific Subsidy for academic publication of research results (books) authored by an individual or a group of researchers.		
Databases Subsidy for creation and operation of a database open to public use, by an individual or a group of researchers.		

Grant-in-Aid for JSPS Fellows	Subsidy for research conducted by JSPS Fellows (including JSPS International Research Fellows) (up to 3 years; as for Cross-border Postdoctoral Fellowship (CDP) up to 5 years)	MF
Fund for the Promo	otion of Joint International Research	
International Leading Research	This grant aims to enable research groups led by top-level researchers in our country to play a central role in the international network, thereby achieving research results of high scientific value internationally. With the participation of postdoctoral fellows and graduate students, the grant seeks to foster researchers who can play leading roles in the international research community in the future.  (7 years (extendable up to 10 years); up to 500 million yen)	
Fostering Joint International Research	Support of joint international research project conducted by a KAKENHI grantee in collaboration with researcher(s) at foreign university or research institution for a period of 6 to 12 months. The grant seeks to markedly advance research plans for the root research project and to foster independent researchers who can be internationally competitive. (up to 12 million yen) [The category name is changed from FY2023 call for proposals.]	
International Collaborative Research	Support of joint international research project conducted by multiple domestic researchers and a researcher who belongs to overseas research institution. In addition to the development of scientific research, the grant seeks to build out infrastructure of joint international research or further strengthen joint international research and to foster researchers who can be internationally competitive. (3 to 6 years; up to 20 million yen) [The category name is changed from FY2023 call for proposals.]	MF
International Activities Supporting Group	Support of international activities within Scientific Research on Innovative Areas. (Set period of the Area: up to 15 million yen per fiscal year) [After FY2018 call for proposals "International Activities Supporting Group" has been incorporated into "Grant-in-Aid for Scientific Research on Innovative Areas "Administrative Group." (It continued until the FY2019 call for proposals.)]	
Home- Returning Researcher Development Research	Support of research to be conducted by a Japanese researcher currently affiliated with an institution abroad who is to be newly appointed at university or research institution in Japan. (up to 3 years; 50 million yen or less)	

<sup>(\*1)</sup> SG: Series of Single-year Grants, MF: Multi-year Fund

<sup>(\*2)</sup> Individuals who are in the prospect of acquiring Ph.D. and those who have acquired their Ph.D. within the past 8 years (provided that, the period of maternity leave and childcare leave taken after the acquisition of Ph.D. may be excluded) are eligible.

### 2. What are the KAKENHI rules?

There are three types of rules: application rules, assessment rules, and spending rules.

Please make sure to adhere to these rules.

O Application rules: eligibility and rules concerning the applications

(Contents of the "Application Procedures for Grants-in-Aid for Scientific Research")

O Assessment rules: rules concerning the pre-assessment (review), the interim and the ex-post assessment

(Contents of the "Rules Concerning the Review and Assessment for Grants-in-Aid for Scientific Research", etc.)

- O Spending rules: rules concerning the use of KAKENHI funding (Contents of the Supplementary Conditions and Funding Conditions when funding is decided.)
- Grants-in-Aid for Scientific Research (KAKENHI) has categories funded by the Series of Single-year Grants and categories funded by Multi-year Funds. Spending rules differ, so please make sure to thoroughly check the Supplementary Conditions (Series of Single-year Grants categories) and Funding Conditions (Multi-year Funds) for the applicable rules.
- For the application rules, assessment rules, spending rules, and FAQ on the KAKENHI program, which covers answers to general questions on the program and other matters, please refer to the KAKENHI website.

Ministry of Education, Culture, Sports, Science and Technology (MEXT):

https://www.mext.go.jp/a\_menu/shinkou/hojyo/main5\_a5.htm

Japan Society for the Promotion of Science (JSPS):

https://www.jsps.go.jp/j-grantsinaid/index.html

FAQs on Grants-in-Aid for Scientific Research:

#### https://www.jsps.go.jp/j-grantsinaid/01 seido/05 faq/index.html

- If you have further questions on the KAKENHI rules, please submit an inquiry to MEXT or JSPS through your research institution.
  - O A point of contact for opinions and requests concerning Grants-in-Aid for Scientific Research is available at the JSPS website. If you have any opinion or request, please submit to the following URL.

https://www.jsps.go.jp/j-iken\_youbou/index01.html

\* A point of contact for opinions and requests concerning competitive research funds is available at the Cabinet Office. If you have any opinions or requests concerning improvements relating to the ease of use of competitive research funds in general, please submit them at the following URL. (Only available in Japanese)

https://form.cao.go.jp/cstp/opinion-0098.html

## 3. Year-round schedule of KAKENHI process

To allow researchers to prepare in advance for the start of their research, they will be informed of review results of new research proposals around January or February.

Schedule for FY2024 Call for Proposals and Notice of Review Results for Main Research Categories (Tentative)

Research Category	Start of Call for Proposals	Deadline for Submission of Applications	Timing of Notice of Review Results
Specially Promoted Research	April 13, 2023	June 19, 2023	Early January 2024
Scientific Research (S)	April 13, 2023	June 19, 2023	Mid-February 2024
Transformative Research Areas (A/B)	April 13, 2023	June 19, 2023	Late February 2024
Transformative Research Areas (A) (Publicly Offered Research)	July 14, 2023	September 19, 2023	Late February 2024
Scientific Research (A/B/C), Early-Career Scientists	July 14, 2023	September 19, 2023	Late February 2024
Challenging Research (Pioneering/Exploratory)	July 14, 2023	September 19, 2023	Late June 2024 (same day as the provisional grant decision)

- O By receiving the notice of review results during the previous fiscal year, researchers are now able to start making advance arrangements such as continued employment of research staff, procurement of goods, and scheduling of research trips before April, when research funds are available.
- O As before, necessary contracts, etc. should be signed <u>after</u> receiving the notice of provisional grant decision.
- O The Grant-in-Aid for Research Activity Start-up is for researchers who could not submit a proposal during the call for proposals period above and therefore follows a different schedule for the call for proposals and review.

Schedule for Research Activity Start-up:

- Start of the call for proposals: March 1 of the previous fiscal year
- Application deadline: mid-May

### 4. Who is eligible to apply for KAKENHI?

In order to apply, applicants should meet the requirements (1) and (2) below.

(1) At the time of application, applicants should belong to a research institution (\*1) and meet all the following requirements.

Applicants need to be recognized by a designated research institution (\*) as being a researcher who meets the requirements a), b), and c) below, and need to be registered in the Cross-ministerial Research and Development Management System (e-Rad) as eligible to apply for a Grant-in-Aid (\*2).

#### Requirements

- a) The applicant must be an individual belonging to a research institution with job assignment including research activity within the said institution. (Whether the job is paid/unpaid, or full-time/part-time is irrelevant. It is not a prerequisite of eligibility that the research activity constitutes the main part of his/her job.)
- b) The applicant must be actually engaged in research activity in his/her research institution. (Those who are only engaged in research assisting jobs are ineligible.)
- c) The applicant must not be a graduate student or any other categories of student. (An individual who has a position in his/her research institution with research activity as his/her main job (e.g., university teaching staff, researcher belonging to a company, etc.), and holds a student status at the same time.)

(The conditions or evaluation criteria on meeting the above requirements might be set separately by contract or provisions of your research institution.)

- \*1 A research institution as defined in Article 2 of the Rules for the Handling of Grants-in-Aid for Scientific Research (announced by the Ministry of Education, Culture, Sports, Science and Technology (MEXT))
  - 1) Universities and inter-university research institutes
  - 2) MEXT facilities and other institutions engaged in scientific research
  - 3) Technical colleges
  - 4) Institutions designated by the MEXT Minister
- \*2 Notwithstanding the requirements stated in (1) a) through c) above, JSPS Research Fellows (DC) are deemed eligible to apply for KAKENHI if they are adopted as JSPS Research Fellows

- (DC). However, please confirm with your research institution regarding the requirements that your research institution must meet.
- (Note) There are research categories such as "Encouragement of Scientists" and "Research Activity Start-up" that differ in eligibility for the KAKENHI application, so please make sure to confirm the Application Procedures for the Grants-in-Aid for Scientific Research when applying.
- (2) The individual must not be categorized as ineligible for grant acquisition in the fiscal year covered by a call for proposals, as a penalty for his/her improper grant spending, fraudulent grant acquisition, or research misconduct using the Grants-in-Aid for Scientific Research (KAKENHI) or other Competitive Research Funds.

## 5. What issues need to be considered when applying?

Applicants should carefully confirm the contents of the Application Procedures for Grants-in-Aid for Scientific Research (KAKENHI).

KAKENHI provides financial support for creative and pioneering research conducted by individual researchers. Therefore, the contents of the research proposal must be original planned by the applicant.

### Applicants must complete the following three matters before applying.

- (1) Ascertainment of the Eligibility for KAKENHI Application (see page 9 "4. Who is eligible to apply for KAKENHI??")
- (2) Confirmation of the Researcher Information Registered
  - The procedures for registration of researcher information and for revision of that information are performed by your research institution using e-Rad. Applicants should check with the person responsible for this in their research institutions for details of the procedures.
- (3) Obtainment of an ID and a Password for e-Rad
  - Your e-Rad ID and password are provided by your research institution.

### Applicants should pay particular attention to the following matters when applying.

- When applying for multiple research projects, make sure to eliminate unreasonable duplications and excessive concentration, and avoid violation of the restrictions on parallel submission of research proposals.
- Avoid errors or omissions in filling out the information on the application form.
- The format of the application documents may not be changed.
- When adding a Co-Investigator to the Project Members List, you must obtain the consent of the perspective Co-Investigator as well as his/her research institution.

O Corrections, etc. of the application documents cannot be accepted after the deadline for submission of applications.

A research team consists of a Principal Investigator, Co-Investigator(s) and Research Collaborator(s). They are defined as follows.

### O Principal Investigator (a member of a funded project)

A researcher with full responsibility for the implementation of the funded project.

### O Co-Investigator (a member of a funded project)

A researcher responsible for carrying out the funded project along with the Principal Investigator, who receives a share of the funds from the Principal Investigator and may use these funds at his/her discretion.

### O Research Collaborator (not a member of a funded project)

A researcher who provides cooperation in carrying out the funded project.

- Even a person who is not eligible to apply for the Grants-in-Aid for Scientific Research can participate as a Research Collaborator.
- A Research Collaborator does not have discretion regarding the use of the Grants-in-Aid for Scientific Research.

Please also enter in your application documents any research grants that you have received from overseas as well as all domestic and foreign research funding, including competitive research funds, subsidies from private foundations and joint research funds from companies.

In KAKENHI grant applications, enter the status of application and acquisition of the following funds in "The Status of Application and Acquisition of Research Grants" column in the Research Proposal Document:

- OForeign research funds; and
- Obomestic and foreign research funding, including competitive research funds, subsidies from private foundations, and funds from companies for contract research and joint research.

For details, please refer to Supplement to "Application Procedures for Grants-in-Aid for Scientific Research -KAKENHI- (Forms/Procedures for Preparing and Entering a Research Proposal Document) for each research category.

### 6. How are applications reviewed?

A peer review (\*) process is carried out in order to select high quality research projects.

(\*) Peer review refers to a process of reviews carried out by peers. For Grants-in-Aid for Scientific Research (KAKENHI), prominent researchers who work hard at each academic field and stand at the front of knowledge creation, review and assess the applications for their peers.

The KAKENHI review process is possible thanks to the cooperation of researchers. JSPS asks researchers' positive participation in the review process.

### O More than 8,000 researchers are involved in the review process.

- In order to ensure the fair selection of the highest-quality review committee members, JSPS makes use of a database of review committee candidates (with approximately 148,000 persons registered) consisting largely of researchers who themselves were selected for the KAKENHI funding.
- O Upon completion of review, the names of the review committee members are disclosed on the KAKENHI website.

### O Disclosure of the review results for research projects

- As for some research categories such as the Specially Promoted Research, the Scientific Research (S/A), and the Challenging Research (Pioneering), the approximate ranking, the opinions expressed in the review results, and some other items will be disclosed.
- As for some other research categories such as the Scientific Research (B/C), the Challenging Research (Exploratory) and the Early-Career Scientists, the approximate ranking, the review results by rating elements, the standard-format opinion, and some other items will be disclosed for research projects that were not adopted.

#### O Audit of review

• From the standpoint of ensuring fairness of the review process, JSPS verifies and analyzes matters such as whether any favors are dispensed and whether reviews are conducted in accordance with the review rules. As a result of this verification process, if any review committee member is found to be dispensing favors or to have conducted reviews not in accordance with the review rules, such findings will be taken into account appropriately, for example by excluding such a review committee member when selecting the reviewers for the next fiscal year and beyond.

### O Disclosure of the review policies and criteria

• For information on the review and evaluation, please refer to the MEXT and JSPS KAKENHI websites.

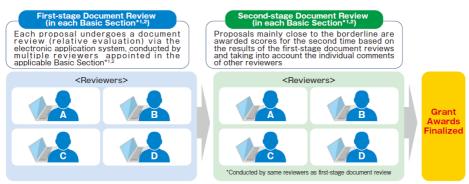
MEXT: <a href="https://www.mext.go.jp/a\_menu/shinkou/hojyo/1284403.htm">https://www.mext.go.jp/a\_menu/shinkou/hojyo/1284403.htm</a>
JSPS: <a href="https://www.jsps.go.jp/j-grantsinaid/01">https://www.jsps.go.jp/j-grantsinaid/01</a> seido/03 shinsa/index.html

### O Review methods (Two-Stage Document Review and Comprehensive Review)

#### [Two-Stage Document Review]

### (Example) Scientific Research (B/C), Challenging Research (Exploratory) and Early-Career Scientists

Each proposal for the Scientific Research (B) is reviewed by six reviewers; each proposal for the Scientific Research (C) and the Early-Career Scientists is reviewed by four reviewers; each proposal for the Challenging Research (Exploratory) is reviewed by six to eight reviewers. As necessary, the review may include process a preliminary screening.

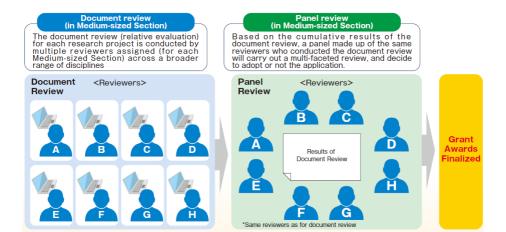


- \*1 For some Basic Sections with a notably small number of applications under Scientific Research (B), joint reviews for multiple Basic Sections are conducted by six to twelve reviewers.
- \*2 For Challenging Research (Exploratory), reviews are conducted in each Medium-sized Section.

### [Comprehensive Review]

### (Example) Scientific Research (A) and Challenging Research (Pioneering)

Between six and eight reviewers are appointed for each proposal in the Scientific Research (A) and the Challenging Research (Pioneering) categories, and each proposal is subject to both a document review and a more thorough and multifaceted panel review. As necessary, the review may include processes such as a preliminary screening and other screening.



\*3 For the Scientific Research (S) and other research categories, in addition to the Comprehensive Review, the review comments produced by researchers specializing in closely related areas are utilized taking into account the specialized nature of applications.

## 7. When do the research grants become available for use?

KAKENHI funding can be used without interruption after the date of notice of provisional grant decision (\*) in the initial fiscal year until the end of the final fiscal year.

O Depending on the research category, research funds are allocated through the Series of Single-year Grants, under which research funds will be provided as grants each single fiscal year, or through the Multi-year Funds, under which research funds for multiple years will be provided in lump sum. Accordingly, the spending rules on these grants differ. (Please refer to 12. and 13. for the differences between the Series of Single-year Grants and the Multi-year Funds.)

ltem	Single-year Grants	Multi-year Fund
Start of research work	New projects: April 1 (Except for projects whose date of notice of provisional grant decision is different)	
(After the date of notice of provisional grant decision (*) (Notes 1, 2)	Continued projects: April 1	Research can be conducted in any fiscal year as long as it is during the research period.
	OAfter the notice of provisional grant decision (*), the necessary contracts (e.g., purchasing of items and hiring of Research Collaborators, etc.) can be concluded and actual research activities can be started before the KAKENHI funding is disbursed and received.	

Deadline for the delivery of goods and provision of services necessary for the research	By March 31	Can be used even after March 31 as long as it is during the research period.
Handling of unused amount	Any unused amount at the end of the research project period must be returned.	
	OReturning any unused amounts will not cause disadvantage for subsequent KAKENHI reviews.	

- (\*) The Notice of Provisional Grant Decision and Notice of Review Results are not the same. Even if your research proposal is "Adopted" by Notice of Review Results, the research grants will only be implemented on or after the date of Notice of Provisional Grant Decision.
- (Note 1) The research grants to the research institutions will be remitted around July for the first term disbursement and around October for the second term. (From the second fiscal year for Multi-year Fund onward, the first term research grant will be disbursed at the beginning of the fiscal year.)

  As for necessary expenses, research institutions should make payments after receiving the research grants or they should pay temporarily and should be reimbursed after receiving research grants. Recipients of grants should ask your research institutions for any clarification.
- (Note 2) Please keep in mind that in the case of new projects for the Fund for the Promotion of Joint International Research (Fostering Joint International Research, Home-Returning Researcher Development Research), the start of research work is not on the day the notice of provisional grant decision is issued, but on the day the form for formal application for grant delivery is submitted.

## 8. What is management by research institutions?

Management and procedures for the Grants-in-Aid for Scientific Research are carried out by research institutions.

### < Reasons for having research institutions perform the management of the Grants-in Aid for Scientific Research >

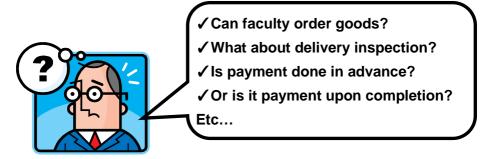
### (1) To reduce the burden on researchers

Researchers can thereby concentrate on their research.



### (2) To prevent rules from being violated inadvertently

- Researchers, who may not be familiar with accounting procedures, etc., are thereby prevented from making mistakes.
- O When using the KAKENHI funding, researchers should observe the Supplementary Conditions and the Funding Conditions in the Spending Rules, as well as the accounting rules prescribed by research institutions to which they belong.
  - If you have any question similar to those below concerning the purchasing of goods, please ask to the person in charge of managing the KAKENHI funding at your research institution.



### 9. What does direct expenses cover?

Direct expense can be used broadly for expenses necessary to carry out the research project (i.e., purchase of goods, travel expenses, personnel costs/honoraria, and miscellaneous expenses).

- O Direct expense can be used broadly for expenses necessary to carry out the research project (including the expenses for compiling research results).
- O Items such as those listed below are not recognized as direct expense. Reminders are given through specification in the Spending Rules, etc.
  - Costs for buildings and facilities (excluding costs for installation, etc. that are necessary in order to install goods that are purchased using direct expenses).
  - Costs for handling accidents or disasters that occur during the implementation of the research project.
  - Personnel costs/honoraria for the Principal Investigator or Co-Investigator(s).
  - Other costs that should be covered by indirect expenses.
- O The Principal Investigator and the Co-Investigator(s) are obliged to take accountability for the judgement on the spending and the use of the expenses as member of the funded project.
- O When using the research grant, you are requested to consider whether it is socially acceptable to pay out as direct expense for scientific research and whether the priority of use of direct expense is appropriate, as well as to use the grant in accordance with the terms of the Spending Rules and regulations of your research institution.

Spending rules: <a href="https://www.jsps.go.jp/j-grantsinaid/16\_rule/shiyourule.html">https://www.jsps.go.jp/j-grantsinaid/16\_rule/shiyourule.html</a>

Direct expenses may be used in combination with other funds under certain conditions.

Please make efforts in an effective and efficient use of KAKENHI funding through efforts such as a combined use with other expenses and a communal use of facilities.

- O Other expenses <u>without restrictions on use</u> can be added to the direct expense and used for the funded project.
- O Combining the direct expense with other non-KAKENHI expenses (that have restrictions on use) is acceptable subject to identifying the expenditure demarcation (\*1).
- O Combining the direct expenses of different KAKENHI funding is acceptable subject to identifying the expenditure demarcation, and also, under certain conditions, by identifying the cost burden of each fund and the basis for calculation<sup>(\*2)</sup>.
- (Note 1) Cases in which the amounts covered by each of the funds can be identified objectively, such as itinerary (one-way trip or round trip), purchased quantities, and efforts.
- (Note 2) Cases in which the basis for the classification of expenditures, such as (estimated) percentage of use, number of research projects, and (estimated) project period, can be sorted out and explained in a rational way.

O Facilities to be shared among multiple research projects can be purchased not only by combining funds among different KAKENHI funding, but also by adding research funds that allow purchasing of equipment by combining funds<sup>(\*3)</sup> with direct expense.

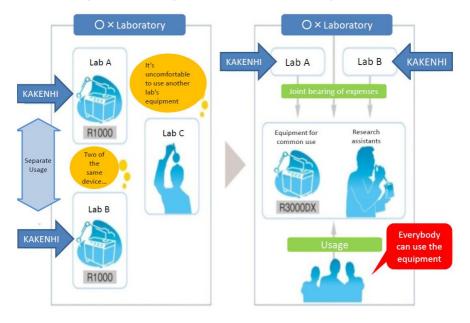
(Note 3) See the following website.

"Concerning the purchase of joint-use facilities with funds from different research funds (a combined use)"

https://www.mext.go.jp/content/20200910-mxt sinkou02-100001873.pdf

### < Image of facilities shared among multiple research projects>

(Example: Image of combining different KAKENHI funding)



- O As long as it does not interfere with the research for which the facility was purchased, the facility may be used for other research as well.
- O When using research funds you must follow the rules prescribed by your research institution. If you wish to combine funds, consult with the person in charge at your research institution.

### 10. What are indirect expenses?

Indirect expense is the funds provided to the research institution to support the research activities for which the KAKENHI funding was granted, as well as to upgrade its research environment.

- O Indirect expenses are expenses for research institutions delivered at a fixed ratio to the direct expense.
  - The amount equivalent to thirty percent of the direct expense will be provided as indirect expense apart from the direct expense.
- O Research institutions may use the indirect expense to improve the R&D environment of researchers who obtain competitive research fund and/or improve the functions of the overall research institution.
  - < Examples of how indirect expense can be used >
  - Personnel costs (Use for personnel costs for the Principal Investigator and Co-Investigator(s) is not prohibited.)
  - Assignment of technical personnel for the sharing and maintenance of jointuse equipment
  - Facility costs (maintenance and management costs, etc.)
  - Equipment costs (purchase costs, operation costs, etc.)
  - Library costs (costs for improvement, maintenance, and management of facilities)
  - Academic journal subscription fee, paper submission fee (article publication charge)
  - Consumables expenses for shared photocopy machines, printers, etc.
  - Costs of research publicity activities
  - Necessary costs for management procedures related to competitive research funding
  - Patent application fees, patent attorney fees, costs of request for review, etc.

### 11. Can a research plan be modified?

Based on the progress of research, the following changes can be made. (Application and/or notification to JSPS is not required.)

### O Changing the allocation of direct expense (within a range of 50% of the total amount of the direct expense)

• For each cost item (purchase of goods, travel expenses, personnel costs/honoraria, miscellaneous expenses), the allocation of expenses can be changed freely within a range of fifty percent of **the total amount of the direct expense** (\*) (or, when fifty percent of the direct expense is three million yen or less, up to three million yen).

#### (\*) The total amount of the direct expense:

Single-year Grants : the decided expense amount of each fiscal year

Multi-year Fund : the decided expense amount for the entire

research period spanning several fiscal years

### O Changing the following items entered in the form for formal application for grant delivery

- Division of roles, direct expense (allocation of shares of each researcher) (change in amount of shares), research implementation schedule, breakdown of the major goods, etc.
- Making partial changes to the on-going research plan without applying to JSPS is expected as long as such changes are within the research objectives described in the formal application for grant delivery. However, decisions should be made appropriately from the standpoint of carrying out research effectively in order to achieve the original research objectives.

The following changes can be made through the appropriate procedures.

(Application and/or notification to JSPS is required.)

### O Major changes in the allocation of direct expense

• Researchers need to go through the necessary procedures in advance for changing the allocation to each cost item if the amount of the change exceeds fifty percent of **the total amount of the direct expense** (\*) (or, when fifty percent of the direct expense is three million yen or less, up to three million yen).

### (\*) The total amount of the direct expense:

Single-year Grants: the decided expense amount of each fiscal year

Multi-year Fund : the decided expense amount for the entire research

period spanning several fiscal years

### O Addition or removal of a Co-Investigator

- Applicants should be careful about what cases fall under addition or removal of a Co-Investigator. For example, changing a Co-Investigator to a Collaborating Researcher participating on the same research team amounts to removal of a Co-Investigator.
- O Extension of the research period due to maternity or childcare leave.
- O Extension of the research period due to research stay abroad, etc.
  - Researchers can flexibly extend the funded research period based on the length of time the funded research was suspended due to research stay abroad, etc.
- O Change in research institution to which the Principal Investigator belongs
  - If the applicant moves to other research institution that is not eligible for

receiving KAKENHI funding, the continuation of the research using KAKENHI funding will not be permitted.

### O Extension of the period of the funded project

- The Multi-year Fund can be extended for a period of one year (\*) by going through the procedures for the acceptance of extension of the funded project during the last year of the project. (In the case of Single-year Grants, the carryover procedures are necessary.)
  - \* As for the Fund for the Fostering Joint International Research, the period of the funded project can be extended until the end of the fiscal year to which the day belongs on which the three years have elapsed from the date of the formal application for grant delivery.



## 12. How to spend the Series of Single-year Grants

As the official grant decision is made for each fiscal year, research grants must be used by the end of each fiscal year. If certain conditions are met, you can use the grants ahead of schedule or carry over to the next fiscal year.

- O Even if a funded research project is planned for a multi-year period, the provisional grant decision and the official grant decision on the research grant for the Series of Single-year Grants will be made only for the relevant fiscal year. (The period of the funded project is a single fiscal year (one year))
- O If the funded project is not expected to be completed for unavoidable reasons that could not be anticipated at the time of the official grant decision, the research grant can be carried over to the next fiscal year for use after following carryover application procedures.
  - There are no restrictions on parallel grant applications between an on-going research project for which the research grant is carried over and new research proposal(s) you are intending to submit.
  - Please refer to the following website for details on carryover application.

MEXT: https://www.mext.go.jp/a\_menu/shinkou/hojyo/1299857.htm

JSPS: https://www.jsps.go.jp/j-grantsinaid/16\_rule/kurikoshi.html

- O By using the Adjustment Funds, Single-year Grants can be used ahead of schedule or in the next fiscal year subject to certain conditions.
  - Please refer to the following website for details on the Adjustment Funds.

MEXT: https://www.mext.go.jp/a\_menu/shinkou/hojyo/1330870.htm

JSPS: https://www.jsps.go.jp/j-grantsinaid/16 rule/chousei.html

### 13. How to spend the Multi-year Funds

As the official grant decision is made for several years, the research grants can be used according to the progress of research without sticking to fiscal year divisions.

O The research grants for Multi-year Funds are budgeted at one time, so for funded research projects planned for a multi-year period, JSPS makes the provisional grant decision and the official grant decision on a research grant for the entire research period in the first year.

(As with the research period, the period of the funded project is more than one fiscal year)

- O The research grants can be used ahead of schedule based on the progress of the research.
- O During the period of the funded project, the research grants can be carried over to the next fiscal year without prior authorization procedures.
- O During the period of the funded project, goods can be purchased over multiple fiscal years.

As for FY2023, the research categories funded by the Multi-year Fund are as follows:

- -Grant-in-Aid for Scientific Research (C)
- -Grant-in-Aid for Challenging Research (Pioneering / Exploratory)
- -Grant-in-Aid for Young Scientists (B)
- -Grant-in-Aid for Early-Career Scientists
- -Grant-in-Aid for Research Activity Start-up

- -Grant-in-Aid for JSPS Fellows
- -Grant-in-Aid for Special Purposes
- -Fund for the Promotion of Joint International Research (International Leading Research, Fostering Joint International Research, International Collaborative Research, Home-Returning Researcher Development Research and International Activities Supporting Group)
- -Grant-in-Aid for Scientific Research (B) (application section "Generative Research Fields")

## 14. What assessments are performed during and after the research period?

Self-assessment or third-party assessment can be used as a basis for readjustment of the research conducted or for leading to development into new research.

- O Self-assessment is conducted for all research projects after the end of each fiscal year (when preparing the Report on the Results, etc.).
- O In the case of the Specially Promoted Research and the Scientific Research (S), an interim assessment by documentation or interview will be conducted around the middle of the research period. An ex-post assessment in writing will be conducted in the fiscal year following the end of the research period.
- O For Transformative Research Areas (A), an interim assessment by means of documents, interviews, etc. is carried out in the fourth fiscal year of the set period for the research area, and an ex-post assessment in the fiscal year following the end of the set period for the research area.
- O For International Leading Research, an interim assessment will be carried out in the fifth fiscal year of the research period, and an ex-post assessment in the fiscal year following the end of the research period.

O The results of the self-assessment, the research progress assessment, the interim assessment, and the ex-post assessment above will be made public through the Grants-in-Aid for Scientific Research Database (KAKEN) of the National Institute of Informatics.



## 15. How are the research results and achievements reported?

Reporting and publicizing the research results and achievements are important for promoting the use of the research achievements in society and for deepening public understanding on the Grants-in-Aid for Scientific Research program.

- O Since the KAKENHI is funded by such as taxes which are collected from people, researchers are required to explain the acquired results and achievements to the society and people as clearly as possible.
- O Submitting a Report on the Results is mandatory.
  - Researchers should submit a report on the results using the designated form upon completion of the research or at the end of each fiscal year (if the carryover of the research grant is approved).
- O Submitting a Report on the Research Achievements is also mandatory.
  - When the research period is completed, researchers should submit a Report on the Research Achievements.
- O The submitted Report on the Research Results, the Report on the State of Research Implementation, and the Report on the Research Achievements are published using the Grants-in-Aid for Scientific Research Database (KAKEN).

The research using the KAKENHI funding should be carried out based on the self-awareness and responsibility of each researcher. Therefore, the publication on the implementation of the research or research achievements, etc. should not come from the government request, and the views and responsibilities on the research achievements should be attributed to the researchers themselves.

KAKEN is a database created and made public by the National Institute of Informatics (NII) in cooperation with MEXT and JSPS.

On KAKEN, the following information is recorded, disclosed and made available for use to the public.



- \*Update schedule is tentative. The content and timing of the posting will vary depending on research category.
- O Information on Adopted Projects (Updating: provisional grant decision- around late April; official grant decision- around July)

- Disclosure information includes "Title of the Research Project"; "Name, Position and Affiliated Research Institution of the Principle Investigator"; "Research Outline(\*1)"; "Budget Amount".
- \*1 "Research Outline" column described in the form of the formal application for grant delivery is disclosed to provide to the public at large with the contents of the research at time of its start in an easy-to-understand form.

### O Information on the State of Implementation, the Results and the Research Achievements

• Disclosure information includes Outline of Annual/Final Research Achievements, the yearly self-assessment including Research Progress Status and Strategy for Future Research Activity, and the research achievements(\*2) including research paper.

(Updated around early November to late December)

- Disclosure of the Report on the Research Achievements in PDF format. (Updated around January to March)
- \*2 Research papers will be accessible through KAKEN by disclosing the digital object identifier (DOI) of the paper published in the academic journal.

#### O Information on Review and Assessment

- Disclosure of the Opinions Expressed in the Review Results.
- Disclosure of reports and results of the interim assessment, the research progress assessment and the ex-post assessment in PDF format.

If researchers presented the research achievements in public, researchers should make sure to indicate it that the obtained as a result of the KAKENHI.

- O When publishing research achievements that have been obtained as a result of the KAKENHI, researchers should always be sure to indicate that the KAKENHI was received.
- O If the indication that support was received in the form of the KAKENHI grant is to be made in the acknowledgments or other designated section, researchers should include <u>JP and the 8-digit JSPS KAKENHI Grant Number.</u>

Researchers should be sure to follow this procedure.

O Examples of the appropriate format for the indication are given below.

When one KAKENHI has been used to write the paper (Grant Number12K34567)

- English: This work was supported by <u>JSPS KAKENHI Grant Number JP12K34567</u>.
- Japanese: 本研究は JSPS 科研費 JP12K34567 の助成を受けたものです。

When multiple KAKENHI have been used to write the paper (three in this case) (Grant numbers xxxxxxxx, yyyyyyyy, zzzzzzzz)

- English: This work was supported by <u>JSPS KAKENHI Grant Numbers JPxxxxxxxx</u>, <u>JPyyyyyyyy, JP zzzzzzzzz</u>.
- Japanese: 本研究は JSPS 科研費 JPxxxxxxxx, JPyyyyyyyy, JPzzzzzzzzz の助成を受けたものです。
  - \* The each research categories for the KAKENHI in English will be shown in the following URL.

JSPS: https://www.jsps.go.jp/j-grantsinaid/01 seido/01 shumoku/index.html

- On the occasion such as you release the research achievements using the KAKENHI broadly to the public, the examples of the indication noting that the research achievements are based on the personal views are given below.
  - English: Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the author(s)' organization, JSPS or MEXT.
  - Japanese: 本研究の成果は著者自らの見解等に基づくものであり、所属研究機関資金配分機関及び国の見解等を反映するものではありません。
- O When announcing the achievements of research funded with the KAKENHI at an academic society meeting, a symposium, or other meetings, researchers should make use of the KAKENHI logo whenever possible.

#### KAKENHI logo



The logo can be downloaded from the following websites.

MEXT: <a href="https://www.mext.go.jp/a\_menu/shinkou/hojyo/1321563.htm">https://www.mext.go.jp/a\_menu/shinkou/hojyo/1321563.htm</a>

JSPS: https://www.jsps.go.jp/j-grantsinaid/01 seido/07 kakenhilogo/index kakenhi logo.html

O Please note that papers supported by the KAKENHI funding are, as a principle, to be handled under the open access policy.

JSPS establishes an implementation policy on open access of papers, and papers supported by JSPS research funds such as the KAKENHI will, in principle, be made open access in several ways. Please note that this is not the case if it is difficult to make open access due to reasons such as copyright and being in an environment where the repository of your institution can not accommodate open access.

Japan Society for the Promotion of Science (Implementation Policy):

https://www.jsps.go.jp/data/Open access.pdf

# O Your active registration on the researcher information including research achievements into "researchmap" is requested.

"researchmap" (<a href="https://researchmap.jp/">https://researchmap.jp/</a>) is a researcher information database that is one of the largest and serves as a comprehensive list of Japanese researchers. Registered information on research results can be openly disseminated over the Internet. "researchmap" is linked to e-Rad and many university faculty databases. Furthermore, in addition to the utilization in the review process, the Japanese Government has planned to further utilize "researchmap". As such, researchers are requested to actively register researcher information in "researchmap".

## 16. What happens if the rules are not followed?

Those who fail to use the funds appropriately according to the rules may be subject to penalties, including restrictions on funding, returning of funds, and restrictions on applying for funding, and/or subject to criminal charges.

#### Improper Grant Spending:

To use the funds for other purposes, intentionally or by gross negligence, for example, to conduct fictitious business transactions ("azukekin") with a contractor through fictitious order placements, or to charge costs higher than actually needed for personnel, travel expenses, etc., or to use of funds in violation of the content of the funding decision or the conditions implied thereof.

- Return of the KAKENHI funding: part or the entire amount
- Suspension of eligibility to apply: for one to ten years
  (The researcher fraudulently using the funds, those who conspired in improper grant spending, and those responsible for managing the grant that was spent improperly.)

#### Fraudulent Grant Acquisition:

To receive funds by deception or other fraudulent means, for example, to apply under the name of another researcher, or to make false entries in the application documents

- Return of the KAKENHI: the entire amount
- Suspension of eligibility to apply: five years (The researcher receiving the funds and those who were involved.)

#### Research Misconduct:

Fabrication, falsification, or plagiarism of data, information, or findings published research achievements, etc., intentionally or due to failing of the basic duty of care that a researcher should know.

- Return of the KAKENHI: part or the entire amount
- Suspension of eligibility to apply: from one to ten years (The individual found to have been involved in research misconduct and

(The individual found to have been involved in research misconduct and persons responsible for the contents of the paper, etc., affected by the research misconduct.)

- The funding of grants will also be suspended for research projects that already have been adopted. It will also become impossible for the Co-Investigators who have been allotted funds to receive a share of these funds.
- In principle, an outline of the fraud, including the names of researchers found to have committed fraud, is made public.
- Applications for, and participation in, competitive research funds other than the KAKENHI may be limited.

Fraudulent grant acquisition, improper grant spending, and misconducts in research activities will undermine public trust in scientific research as a whole. It is, therefore, vital that those who utilize public research funds conduct their research activities in accordance with appropriate research ethics.

## 17. Code of conduct, laws and regulations, etc. that scientists must adhere to

Both to ensure the quality of scientific knowledge and to gain the trust of society, please strive to conduct research activities fairly and conscientiously with the adherence to the code of conduct for scientists.

In pursuing research activities, take careful note of the following content:

### [Extraction from "Code of Conduct for Scientists – Revised Version –" by the Science Council of Japan dated on January 25, 2013]

#### I. Responsibilities of Scientists

#### (Basic Responsibilities of Scientists)

1 Scientists shall recognize that they are responsible for assuring the quality of the specialized knowledge and skills that they themselves create, and for using their expert knowledge, skills and experience to contribute to the health and welfare of humankind, the safety and security of society and the sustainability of the global environment.

#### (Attitude of Scientists)

2 Scientists shall always make judgments and act with honesty and integrity, endeavoring to maintain and improve their own expertise, abilities and skills, and shall make the utmost effort to scientifically and objectively demonstrate the accuracy and validity of the knowledge they create through scientific research.

#### (Scientists in Society)

3 Scientists shall recognize that scientific autonomy is upheld by public trust and the mandate of the people, understand the relationships between science, technology, society, and the natural environment from a wideranging perspective, and act in an appropriate manner.

#### (Research that Answers to Social Wishes)

4 Scientists shall recognize that they are responsible for answering to the wishes of society to investigate into truths and to achieve various issues. When using research funds that are to be provided for establishing the research environment and for conducting research scientists shall always recognize that such broad social expectations exist.

#### (Accountability and Disclosure)

5 Scientists shall strive to disclose and actively explain the roles and significance of their own research, evaluate the possible effects of their research on people, society and the environment as well as the changes that their research might engender, neutrally and objectively disclose the results of this evaluation, and build a constructive dialogue with society.

#### (Dual Use of Scientific Research Outcomes)

6 Scientists shall recognize that there exist possibilities that their research results, contrary to their own intentions, may be used for destructive actions, and shall select appropriate means and methods as allowed by society in conducting research and publicizing the results.

"Code of Conduct for Scientists" by the Science Council of Japan: http://www.scj.go.jp/ja/scj/kihan/ ["For the Sound Development of Science – The Attitude of a Conscientious Scientist –" by the Japan Society for the Promotion of Science (JSPS)]

(Japanese version (text version)) ("For the Sound Development of Science" Editorial Committee on JSPS): <a href="https://www.jsps.go.jp/file/storage/general/j-kousei/data/rinri.pdf">https://www.jsps.go.jp/file/storage/general/j-kousei/data/rinri.pdf</a>

### O Participation in a research ethics education coursework and compliance education, etc.

The Principal Investigators and Co-Investigators must engage in research activities after learning the ethical standards demanded of researchers, etc. by participating in the research ethics education coursework and compliance education implemented by their research institutions.

# O Participation status in a research ethics education coursework, etc. will be confirmed on the occasion of the formal application for grant delivery and the request for payment.

Participation status in a research ethics education coursework, etc. for the Principal Investigators and the Co-Investigators will be confirmed on the occasion of the formal application for grant delivery and the request for payment into the KAKENHI electronic application system. Please make sure to participate in the research ethics education coursework, etc. in accordance with the research institutions policy on the research ethics education coursework, etc.

In addition, as JSPS provides research ethics educational materials such as the "For the Sound Development of Science -The Attitude of a Conscientious Scientist-", and the "e-Learning Course on Research Ethics [eL CoRE]" based on such materials, so please utilize them appropriately.

JSPS: <a href="https://www.jsps.go.jp/j-kousei/rinri.html">https://www.jsps.go.jp/j-kousei/rinri.html</a>

### O Ensuring soundness and fairness of research activities (research integrity)

- With the internationalization and openness of research activities in the recent years, there is a growing concern such as undue foreign influence and other factors leading to researchers unknowingly being trapped in conflict of interest or conflict of responsibilities or to the leakage of scientific and technological information.
- As such, researchers should endeavor to ensure the transparency of and have full accountability for their research activities when conducting research internationally, and appropriately report and declare any necessary information to their affiliated institutions in accordance with the rules, etc. on conflict of interest and other related matters established by their affiliated institutions.
- For details, refer to the following website:

Discussions on research integrity

Cabinet Office: https://www8.cao.go.jp/cstp/kokusaiteki/integrity.html

## Depending on the research contents, necessary procedures may be stipulated by laws and guidelines.

In addition to the below, laws and regulations, guidelines, etc. may be stipulated according to research contents.

Research Contents Included in the Research Plan	Related Laws and Guidelines
Medical and Biological Research Involving Human Subjects	∘Ethical Guidelines for Medical and Biological Research Involving Human Subjects
Research Including the Handling of Specified Embryos	<ul> <li>○Act on Regulation of Human Cloning         Techniques</li> <li>○Ordinance for Enforcement of the Act         on Regulation of Human Cloning         Techniques</li> <li>○Guidelines on the Handling of         Specified Embryos</li> </ul>
Research Plan Including the Derivation or Utilization of Human Embryonic Stem Cells	<ul><li>○Guidelines on the Derivation of Human Embryonic Stem Cells</li><li>○Guidelines on the Utilization of Human Embryonic Stem Cells</li></ul>
Research Including Producing Germ Cells from Human iPS Cells, etc.	∘Guidelines on the Research on Producing Germ Cells from Human iPS Cells or Human Tissue Stem Cells
Research Including the Production and Utilization of Human Fertilized Embryos	<ul> <li>○Ethical Guidelines for Research on Assisted Reproductive Technology Treatment Producing Human Fertilized Embryos</li> <li>○Guidelines for Research Using Genealtering Technologies on Human Fertilized Embryos</li> </ul>

Clinical Trials on Gene Therapy etc.	∘Ethical Guideline for Clinical Trials on Gene Therapy, etc.
Research Including Genetic Modification Experiment	<ul> <li>Act on the Conservation and Sustainable Use of Biological Diversity through Regulations on the Use of Living Modified Organisms, etc.</li> </ul>
Research Plan Including Research Using Pathogens, etc.	∘Act on the Prevention of Infectious Diseases and Medical Care for Patients with Infectious Diseases
Studies Involving Animal Experiments	○Fundamental Guidelines for Proper Conduct of Animal Experiment and Related Activities in Academic Research Institutions
Studies Involving Provision of Technology for which the Influence on Nonresidents or Foreign Countries is Regulated or Export of Goods	<ul> <li>Foreign Exchange and Foreign Trade Act, etc.</li> <li>*Take note of said act and the rules, etc. of your affiliated institution, and be sure to check the security trade controls systems and handling method, etc.</li> </ul>
Research Including Acquisition, Bring- in, Purchase and Receipt of Foreign Biological Samples	∘The Guidelines on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from Their Utilization, etc.
Research that Requires Social Consensus (Consent and/or Cooperation of Person Involved) Research that Requires Consideration in the Handling of Personal Information (e.g. Protection of the Confidentiality of Personal Information, Protection of Human Rights)	∘Act on the Protection of Personal Information, etc.

The above table is tentative translation.



**Inquiries:** In principle, inquiries should be made through the research institution.

### Scientific Research Aid Division, Research Promotion Bureau Ministry of Education, Culture, Sports, Science and Technology

3-2-2 Kasumigaseki, Chiyoda-ku, Tokyo 100-8959 JAPAN Tel. 03-5253-4111 (ext. 4183)

Website: <a href="https://www.mext.go.jp/a\_menu/shinkou/hojyo/main5\_a5.htm">https://www.mext.go.jp/a\_menu/shinkou/hojyo/main5\_a5.htm</a>

# Research Aid Planning Division<sup>①②</sup>, Research Aid Division I<sup>③</sup>, II<sup>④</sup>, III<sup>⑤</sup>, Research Program Department Japan Society for the Promotion of Science

5-3-1 Kojimachi, Chiyoda-ku, Tokyo 102-0083 JAPAN Tel. 03-3263-4796<sup>①</sup>, 0964<sup>②</sup>, 0976<sup>③</sup>, 1431<sup>④</sup>, 4927<sup>⑤</sup>

Website: https://www.jsps.go.jp/j-grantsinaid/index.html