Fund for the Promotion of Joint International Research (International Leading Research) Assessment Criteria for Review

Grants-in-Aid for Scientific Research (KAKENHI) aim to dramatically develop all academic research, from basics to applications, throughout all research fields. In the review for allotment of research funds, each reviewer is required to make appropriate and fair judgment as to whether the submitted research proposals could contribute greatly to this end.

The review of this research category will be conducted under three review sections: Humanities and Social Sciences, Science and Engineering, and Biological Sciences. The review method will be a Comprehensive Review in which all reviewers will first conduct document review on all research proposals, then the same reviewers will conduct discussions from a broad perspective on each research proposal in the panel review.

With deep understanding and extensive discussions on the research proposals under this review method, you are asked to determine the originality, creativity, and feasibility of the proposal from multifaceted perspectives and conduct appropriate assessments so as to discover excellent research projects.

Note that if there is a large number of applications, a Preliminary Screening will be conducted in order to narrow down to the number of projects appropriate for all reviewers to conduct document review, and each application will be assigned a relative overall score on a scale of 1 to 5.

In the document review, you will be asked to determine whether or not each research proposal is eligible for an interview based on the individual rating elements listed below. In the panel review, reviewers will conduct discussions, taking into consideration as appropriate the results of the document review, and select the research projects to be interviewed. Next, based on the results, etc. of the interviews, the panel will determine the adoption of research proposals and allocation of research funds.

In the review process, you should also utilize the review comments and results of overseas reviews prepared by researchers in the close field of specialization.

In conducting the review, you do not necessarily have to give high scores to research proposals that marked high scores in all of the individual elements. You are asked to conduct appropriate assessments so as to discover significant research projects over a wide range and enable the progress of scientific research while giving consideration to the diversity of research such as characteristics of the fields.

Note that you must not conduct reviews of research proposals submitted by any research team consisting of researchers whom you have vested interests.

i Assessment Criteria

[Rating Elements]

A. Significance and Necessity of International Joint Research

- Is the applicant a researcher who has a record of excellent research achievements and an international research network?
- Does the research proposal include the participation of overseas joint researchers who are expected to produce outstanding research results? Are their roles, content of the research, and their necessity clear and sufficiently explained? Is the state of preparation appropriate?
- In light of the global research trends, could the applicant's research group have significant competitive advantage, and could we expect them to achieve research results of high scientific value internationally?
- Is the research proposal capable of fostering excellent researchers who can play leading roles in the international research community in the future?
- Could we expect the researchers to continue playing a central role in the international network after the completion of the research period?
- Could we expect to see the creation of a scientific field of international importance, dramatic development and expansion of that field, and efforts to tackling global issues through that field?

B. Remarks on the Content of the Research Plan

- (1)Scientific Importance and Relevance of the Research Project
- Is the research proposal an important research project that should be promoted from a scientific perspective?
- Is the "key research question or issue" comprising the core of the research project clearly stated? Is it original and creative?
- Does the research proposal clearly show the circumstances leading to this research proposal, global research trends, and the positioning of this research within the relevant domain or field?
- By conducting the proposed research project, could we expect positive effects on broader fields, science and technology, the society or other areas?
- (2) Validity of the Research Method
- Is the research method, etc. specific and appropriate to achieve the research objective? Also, are the research expenditures consistent with the research plan?
- Is the state of preparation appropriate to achieve the research objective?

(3) Appropriateness of Ability and Research Environment to Conduct Research

- Judging from the research activities, etc. conducted over the years, does the applicant possess sufficient ability to carry out the research plan?
- Has the applicant secured a research environment that he/she needs to conduct the research plan including research facilities, equipment, and research materials?

C. Appropriateness of the plan for Fostering Early-career Researchers

 Does the research proposal provide a specific plan for fostering early-career researchers that leverages the internationally advantaged research environment, functions of the international network, etc.? Could we expect to see the effects?

- Does the research proposal have an organically coordinated system to foster early-career researchers within the research team, and could we expect that system to foster excellent researchers?
- Does the research proposal clearly describe initiatives that will not only enable early-career researchers to carry out the research project, but also support their self-reliance, and can we expect to see sufficient effects?

D. Effectiveness of Support by Research Institutions and Ideas on Feeding back to Research Institutions

- Could we expect adequate support from the research institution to carry out a large-scale, long-term international joint research?
- Does the research proposal describe specific support systems and content to be provided by the research institution to enable early-career researchers and others to effectively implement international exchange?
- Does the research proposal provide specific ideas on appropriately feeding back to his/her research institution the experience gained from the implementation of a large-scale, long-term international joint research, fostering of early-career researchers, etc., thereby contributing to the further internationalization of his/her research institution?

[Overall Scores in the Preliminary Screening]

For each research proposal, make a comprehensive judgment based on the rating elements A through D above, and assign a relative overall score on a scale of 1 to 5 (with 5 being the highest priority rank for research proposals most eligible to proceed to subsequent reviews) according to the scoring distribution shown below.

If you have "vested interests" in a research proposal, enter the reason in the "Reason for Vested Interests" column.

Scoring Classification	Scoring Distribution
5	10%
4	10%
3	20%
2	20%
1	40%
Cannot evaluate because it has interests	_

[Entering the Review Comments in Document Review]

Although document review and panel review will be conducted by the same reviewers for International Leading Research, the review comments given in document review will be presented along with the name of the reviewer as review materials in order to deepen the discussions at the panel review.

In the "Review Comments" column, enter your review comments for every research proposal focusing on the strengths and weaknesses of each research proposal.

ii Other Evaluation Items

Validity of Research Expenditure

In an aim to distribute KAKENHI grant effectively and efficiently, consider the following points in terms of the validity and necessity of research expenditure and assign a rating according to the following rating categories. (Rating categories other than (Blank) should be assigned only if you can determine from the perspective of consistency with the research plan, that the proposed research expenditure clearly falls under the content of each such assessment criteria.) Note that in this research category, JSPS plans to allocate the amounts of research expenditure requested in the application to the maximum extent possible to achieve a sufficiency rate close to 100%. Note that if you are assigning \triangle or \times , please describe the specific reasons for such judgment in the "Reason leading to the judgment" column.

- Is the content of research expenditure reasonable and can we expect that the research expenditure will be used effectively?
- Are items genuinely necessary for the implementation of the research plan properly budgeted, such as costs for purchasing equipment?
- If any of the expenditure categories (equipment costs, travel expenses, or personnel cost/honoraria) exceeds 90% of the total expenditure, can we expect that the research expenditure will be used effectively for the implementation of the research plan?

Rating Category	Assessment Criteria
(Blank)	This research can be implemented with an average sufficiency rate
Δ	Judging from the content of the research plan, it is desirable to decrease the sufficiency rate
×	The content of research expenditure is questionable

iii Points to be Noted

(1) Handling of "The Status of Application and Acquisition of Research Grants" column

The status of applications of other research proposals and acquisition of other research grants are to be referenced <u>in the panel review</u> to judge "whether or not the research project can be fully implemented without unreasonable duplication and/or excessive concentration in the grant allocation." As such, they should not be considered in the document review.

(2) Handling of "Issues Relevant to Human Right Protection and Legal Compliance" column

Research proposals that require the protection of human rights and legal compliances in implementing the research plan must be conducted after following necessary procedures and taking necessary measures such as obtaining the approval of the ethics committee, etc. inside and outside the research institution based on relevant laws and regulations. For this reason, <u>you do not need to consider them as evaluation items for the document review.</u>

If you find it necessary to inform the research institution in advance, for example, of any inadequacy in the prescribed procedures or measures, etc. in implementing the research, please describe the specific reasons for such judgment in the "Reason leading to the judgment" column. If the research proposal is adopted, JSPS will notify the applicant's affiliated research institution to carry out such prescribed procedures or measures, etc. Even if the research proposal is not adopted, JSPS will disclose in the review results that there was inadequacy in the prescribed procedures or measures, etc.

Note also that the "Reason leading to the judgment" column may be left blank in case "This item is not applicable" or if you find "No particular problem (including cases that cannot be judged)."