Items to be entered in the Website

1ページ目、2ページ目の各項目名については、外国人の方にその内容が分かるよう、便宜的に英訳も併記 していますが、審査に付す際には、日本語のみの表示となります。

The item names written in English in the first two pages of this form (to be entered in the Website) are provided for the convenience of non-Japanese applicants. Only the Japanese item names will be shown when this form is sent to reviewers.

令和3年度(2021年度) 基盤研究(C)(一般)研究計画調書 RESEARCH PROPOSAL DOCUMENT GRANT-IN-AID FOR SCIENTIFIC RESEARCH (C) (General) (FY2021)

令和XX 年XX月XX日

September 1st, 2020 1版 1st edition

新規

New Proposal

·····································	基盤研		応募团		一般					
Research Category 小区分 Review Section	Scientific R 関連		Application	Section	General					
(Basic Section)										
研究代表者氏名 Principal	(フリガラ		イビョウ タ	<u>ロウ</u>	XV					
Investigator (PI)	(漢字等 Name (in Roma	(漢子寺) Name (in Roman letters) DAIHYO TARO								
所属研究機関 Research Institution	北海道大学	北海道大学 This should exactly match the name registered in your e-Rad record. If there have been recent changes in your academic u								
部局 Academic Unit	研究院 appropriate changes in your e-Rad record.									
(School, Faculty, etc.) 職	助教 🖌	助教								
Position										
研究課題名 Title of Proposed Research Project	Research title should clearly reflect the content of research (purpose, method and goal), what you want to achieve and to what extent, within the proposed research period. It should not exceed 200 half-width or single-byte (or 40 if full-width or double-byte & half-width mixed, in case of Japanese) characters.									
	年度	研究経費 (千円) Annual	を 使用内訳(十円) Breakdown (1000 yen)							
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than 1000 yen.	令和6年度									
	FY2024Instead of applying for the same amount (total or per breakdown item) each year, t令和7年度 FY2025adjust the costs/expenses in line with the research needs, procedure etc.						ach year, try to			
	総計 Sum Total						F			
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研究計画最終年度 Research proposal sub fiscal year previous to the of an on-going resea	omission in the e final fiscal y									

Items to be entered in the Website

研究組織(研究代表者及び研究分担者)

Project Members List (Principal Investigator (PI) and Co-Investigator (Co-I))

	氏名(年齡) Name (Age)	Resea Academic Uni	属研究機関 rch Institution 部局 t (School, Faculty, etc.) 職 Position	学位 Academic Degree 役割分担 Role in this Project	令和3年度 研究経費 (千円) Research Expenditure for FY2021 (Unit: 1,000 yen)	エフォー ト (%) Effort (%)			
π	00000000 (00)	(00000) 北海道大学		PH.D	(0111: 1,000 yei)				
研究代表者	ダイヒョウ タロウ DAIHYO TARO	(000) 学研究	院	研究全体の総括	700	30			
PI		(00) 助教							
研	00000000 (00)	(00000) 東京大学		学士(医学)					
研究分担者	ブンタン サブロウ BUNTAN SABURO	(000) 医学系研究	科	実験の実施、分析	300	10			
Co -I		(00) 特任	[Co-Investigator (Co-I)]: Re Aid Program	searcher who is eligible for ap	plication to the (Grants-in-			
研究	00000000 (00)	(00000) 北海道大学	*You can include in your p no eligibility for KAKENH	roject co-researcher(s), from ab II applications as "Research (Collaborators", b	ut please			
研究分担者	レンケイ カズオ 連携 一夫	(000) 学内共同和	"research methods" etc.). T (CR), applicable for such p	main application (sections suc) his is because the category of researchers in the past applic	Collaborating R	esearcher			
Co -I		(00) 博士研究員	anymore. * It is possible to change the order of Co-Investigators, in the Electronic applicat system, using the "up-down" button. Each Co-investigator is required to give his/her consent through the Electron application system. If a researcher included as Co-Investigator has the status of disapproval by his/ research institution, application can't be submitted unless you delete his/her name a Co-Investigator.						
		0	Number, the information re your institution of affiliatio confirm if the informatior	tronic Application System usin elated to above items as registen in should be displayed automat in is correct, and make appro- ror message, you may be either	red in the e-Rad ically. You are re priate changes	system of equired to whenever			
			accompanied with the speci	ctor of Science, Ph.D, Maste alization as applicable, as follow e (Sciences), Doctor of Engi ces), Ph.D	ws:				
			(Roles in the project) Elaborate the role and mode of collaboration among the PI and Co-I(s). Make sure to provide concrete information rather than simply mentioning investigator, collaboration".						
			(Research Expenditure for I)	FY2021					
			Enter the amount in the un For Co-Investigator (Co-I) p for the 2nd year and therea	participating in a multi-year fu	nded program, th	e amount			
	合計 00 名 Total Number o	of Members: 00	(Effort) It is the percentage of time research in question, if the educational and other activi	e allocation (%) necessary for "entire yearly working time" ities) of the researcher is set at participating in a multi-year	(= time spent on 100%.	research,			

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1. Research Objectives, Research Method, etc.

This research proposal will be reviewed in the Basic Section of the applicant's choice. In filling this application form, refer to the Application Procedures for Grants-in-Aid for Scientific Research -KAKENHI-.

In this column, research objectives, research method, etc. should be described within 3 pages. A succinct summary of the research proposal should be given at the beginning.

The main text should give descriptions, in concrete and clear terms, of (1) scientific background for the proposed research, and the "key scientific question" comprising the core of the research plan, (2) the purpose, scientific significance, and originality of the research project, and (3) what will be elucidated, and to what extent and how will it be pursued during the research period.

If the proposed research project involves Co-Investigator(s) (Co-I(s)), a concrete description of the role-sharing between the Principal Investigator (PI) and the Co-I(s) should be given.

[SUMMARY]

Give a clear and brief outline of the (1) scientific background, (2) research objectives, and (3) research methods using straightforward expressions that are readily understood by the reviewer.

[MAIN TEXT]

(1) Scientific background for the proposed research and scientific question(s)

Concerning the research object/target, first describe what has been already elucidated and what problems remain yet to be solved. Then, raise the issues comprising the core of your research plan.

[Check-points common to all pages]

Does the <u>Application Form type</u> match the <u>Review Section</u> applied by you?

For proposals written in English, the recommended font is Times New Roman, 11-point

size minimum (except for References, which can be 9-point)

(Although Reviewers may handle PDF file, the proposal text should be easily readable without any enlargement!)

Check if the space and pages allocated to each item, and the margins

(upper & lower: 20 mm each; Left & right: 25mm each) are preserved.

*Do not change the format. Do not delete or insert extra pages!

*Any changes in margins may result in loss of information upon printing!

Carefully check for grammatical and spelling errors, and calculation mistakes (ensure consistency with the data entered via the electronic system).

Are the illustrations clearly visible when printed in monochrome mode?

• Even if your illustrations may be in color, they will be printed or converted to PDF mode in gray scale (monochrome) mode and delivered to the reviewers.

Does your writing "flow" with smooth transitions?

• Is the writing logical?

• It may be good idea to use subheadings and itemization, and also emphasize important parts of the text showing in bold or with underline.

• Avoid the frequent use of foreign words, abbreviations and specialist terms and ensure that it is understood by reviewers who may be from other fields.

• Is the first sentence (topics sentence) catchy (appealing)?.

• Are the sentences too long and complex? If yes, better try to breakdown to ensure that one sentence gives one message.

Avoid leaving large blank spaces. It is a good practice to fill first at least until the half of the last page of each item, and use up the available space by inserting (additional) illustrations (diagram, table) with captions and explanation.

[1. Research Objectives, Research Method, etc. (continued from the previous page)]

(2) Purpose, scientific significance, and originality of the research project

State the purpose of proposed research that is consistent with the scientific issues raised in (1).

Demonstrate the scientific peculiarities and strengths of your research, for example, by showing how it differs from other similar research projects. Also, convey a clear message that this research will be conducted by the principal investigator, playing the key role, in an independent and subjective manner. * The reviewer is the one to make judgements. Therefore, <u>avoid</u> strong statements, such as: "... is original, because of ..." or "This research has high originality from the viewpoint".

(3) What will be elucidated, and to what extent and how will it be pursued during the research period

Describe, in an easy-to-understand way, what methods you will explore, and how you will execute the research plan (schedule) to achieve the objectives you mentioned in (2) above.

Here are some recommendations:

• Arrange the research purpose item-wise, stating the content and goal for each item. *In case of many items, arrangement in tabular form is recommended.

• Describe the research plan for each financial year.

*To enhance understanding, show the connection with research expenses requested for each financial year

• Justify the appropriateness of the division of responsibilities among the Principal Investigator and Research Co-Investigator(s).

* In the case of complicated organizational structure and involvement of too many people, a diagram showing the relationship of research organizations may be helpful.

Research methods should be described as concretely as possible.

In addition to the results expected, mention about the ripple effects such as the potential for practical applications to solve broader academic, science & technology, and social issues.

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[1. Research Objectives, Research Method, etc. (continued from the previous page)]

Avoid leaving large blank spaces. It is a good practice to fill first at least until the half of the last page of each item, and use up the available space by inserting (additional) illustrations (diagram, table) with captions and explanation.

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2. Research Development Leading to Conception of the Present Research Proposal, etc.

In this column, descriptions should be given within 1 page, of (1) applicant's research history leading to the conception of this research proposal and its preparation status, and (2) domestic and overseas trends related to the proposed research and the positioning of this research in the relevant field.

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(1) Applicant's research history and preparation

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Considering section 1(1) mentioned earlier, section "Applicant's Hitherto Research Activities" to be described later in 3(1), and section (2) below, give an easy-to-understand summary of the scientific concepts leading to the proposed research.

Mention the state of preparations such as preliminary surveys etc., and thereby explain that you are ready for the proposed research.

(2) Domestic and overseas trends and positioning of the proposed research

Cite appropriate references (sources) to support your statements.

* Plain writing that assumes a certain level of expertise of researchers within the proposed "Review Section" is fine. But, make it simpler, if the "Review Section" is likely to have reviewers beyond the proposed specialization.

Too many citations (to references/sources) are not recommended.

Describe the scientific significance of the proposed research, justifying its originality, in the context of the domestic (within Japan) and international research trends.

3. Applicant's Ability to Conduct the Research and the Research Environment

In this column, descriptions of (1) applicant's hitherto research activities, and (2) research environments including research facilities and equipment, research materials, etc. relevant to the conduct of the proposed research should be given within 2 pages to show the feasibility of the research plan by the applicant (PI) (and Co-I(s), if any).

If the applicant has taken leave of absence from research activity for some period (e.g. due to maternity and/or child-care), he/she may choose to write about it in "(1) applicant's hitherto research activities".

(1) Applicant's hitherto research activities

Considering item (1) of the previous section and item (2) below, provide evidences to support your argument regarding the feasibility of proposed research. For this, describe the past record of your research (type, content, and achievements such as scientific articles and also prize(s) worth of special mention, etc.)

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Besides giving the examples of important achievements, you may describe past research activities that, for example, didn't yet yield tangible results but helped to explore novel scientific problems.

* Note:

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- 1. The description in this column is to explain the feasibility of the research plan. On citing research achievements (research papers, books, patents, invited talks, etc.) they should be given not as an exhaustive list but as supporting evidence to prove the applicant's ability to conduct the proposed research.
- 2. Sufficient information should be given so that the reviewers can identify the research achievements.

In the case of a research paper, for example, the relevant bibliographic information, including the title of the paper, the author(s), the title and the volume of the journal, the publication year, and the pages of the article should be given.

- 3. The research papers that can be cited are only those already published or accepted for publication.
- 4. These notes written in italics should be deleted when filling this column.

[3. Applicant's Ability to Conduct the Research and the Research Environment (continued from the previous page)]

As this space is not intended for providing a list of all publications, write this section by citing selected publications that sufficiently demonstrate the research capacity of the principal investigator.

The reviewers will have access to Researchmap* or KAKEN databases in case of need to look at the list of publications of the applicant. In order to enable this functionality, each applicant is required to update his/her publication list in Researchmap and also to register the "Research Funding Number" (科研費研究者番号).

*It is envisaged that the researchmap database will be increasingly used in connection with applications submitted to the country-level competitive funds. For this reason, please ensure that your publication record in it is up-to-date.

(2) Research environments including research facilities and equipment, research materials, etc. relevant to the conduct of the proposed research

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Describe the state of current research environment (facility, equipment, samples etc.) to show that it is appropriate for the proposed research. If the research environment is still inadequate at present, explain this aspect and mention about the measures to be taken to improve the situation so as to be able to smoothly conduct the proposed research.

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Describe the measures to be taken if the research plan doesn't proceed as expected.

4. Issues Relevant to Human Right Protection and Legal Compliance

(cf. Application Procedures for Grants-in-Aid for Scientific Research)

In case the proposed research involves such issues that require obtaining consent and/or cooperation of the third party, consideration in handling of personal information, or actions related bioethics and/or biosafety (including the laws and regulations and the guidelines in the country/region(s) where the joint international research is to be conducted), the planned measures and actions for these issues should be stated within 1 page.

This applies to research activities that would require approval by an internal or external ethical jury, such as research involving questionnaire surveys, interviews and/or behavior surveys (including personal histories and images) including personal information, handling of donated specimens, human genome analysis, recombinant DNA, and experimentation with animals.

If the proposed research does not fall under such categories, enter "N/A (not applicable)".

[Example 1]

As the proposed research plan involves the use of only, there should, normally, be no need to take measures related to Human Right Protection or to follow procedures for Legal Compliance. In the case of an unexpected situation during the course of this research requiring legal procedures, however, necessary measures will be taken before continuing the research further.

[Example 2]

In addition, the proposed research also involves collection of personal information that requires handling considerations. Therefore, personal information will be collected only after obtaining appropriate consent from the concerned individuals and the collected information will be managed under strict supervision. Furthermore, it will not be used for purpose other than the proposed research, and the research results will be publicized only after data anonymization in order to prevent from identifying any individuals by their names.

If the information provided in this space is found to be incorrect or insufficient by the reviewers, the applicant may be informed after selection, if any, at a later date through the university office.

5. Items to be Entered When New Application is Made in the Fiscal Year Previous to the Final Year of the Research Period of an On-Going KAKENHI Project

(For an application that comes under this category, this column is a mandatory entry.

(cf. Application Procedures for Grants-in-Aid for Scientific Research))

In this column, the applicant should give within 1 page: (1) the relevant information on the on-going project (for which FY2021 is the final year of the research period) including the original plan at the time of application/adoption and the research accomplishment such as new knowledge acquired, and (2) the reason why he/she is submitting this new proposal for FY2021 on top of the on-going project (in terms of the development of the on-going research, necessity of new research budget, etc.).

If not applicable, leave this page blank. (Do not eliminate the page.)

Research Category	ch Category Project Number Title of the Research Project			
			$\begin{array}{c} FY \\ FY \\ \hline 2021 \end{array} to$	

The original plan at the time of application/adoption and the research accomplishment of the ongoing project.

The reason for submission of this new proposal.

<u>卅究</u> 約	経費とその必要性 Research	Expenditure	and <u>Th</u> eir	Necess	ity	(金額単位:千円)uni	t: 1000 yer
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Items to be entered in the Website Scientific Research (C) (General) 10-()

(金額単位	:	千円)い	unit∶	1000	yen

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研究費の応募・受入等の状況 The Status of Application and Acquisition of Research Grants (1)応募中の研究費 (1) Grants in the Application Stage

Items to be entered in the Website

Scientific Research (C) (General) 11-()

研究者氏名 Name					
資金制度・研究 費名(研究期間 ・配分機関等名) Funding scheme, Grant category (Research period, Funding organization, etc.)	研究課題名 (研究代表者氏名) Title of the Research Project (Name of the PI)	役割 Role in the Project	令和3年度 の研究経費 (期間全体の額) Research Expenditure in FY2021 (Research Expenditure for the whole period)	(%) Effort (%)	研究内容の相違点及び他の研究費に加えて 本応募研究課題に応募する理由 (科研費の研究代表者の場合は、研究期間全体の受入額) Distinction of the research contents, and Reason for submission of this KAKENHI application in addition to the other projects. (For a KAKENHI grant as PI, enter the total research expenditure for the whole research period.)
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Items to be entered in the Website

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資金制度・研究 費名(研究期間 ・配分機関等名) Funding scheme , Grant category (Research period, Funding organization, etc.)	研究課題名 (研究代表者氏名) Title of the Research Project (Name of the PI)	役割 Role in the Proj ect	令和3年度 の研究経費 (期間全体の額) Research Expenditure in FY2021 (Research Expenditure for the whole period)	エフォ - ト (%) Effort (%)	本応募研究課題に応募する理由 (科研費の研究代表者の場合は、研究期間全体の受入額)
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