Purp	ose	οf	the	R	esear	ch
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The applicant should indicate the general idea of the research and the specific purpose of the research clearly and specifically with the literature referred to as needed. The following points should be highlighted. [Refer to the rules concerning the screening and assessment for Grants-in-Aid for Scientific Research. (cf. Application Procedures for Grants-in-Aid for Scientific Research)]

Scientific Describ (of Application Procedure for Central in Aid for Scientific Describ)
Scientific Research. (cf. Application Procedures for Grants-in-Aid for Scientific Research)]  1) What will be alwaids to dead to what output will it be pursued during the research paried.
1) What will be elucidated and to what extent will it be pursued during the research period
2) The scientific features, originality and expected results and significance of the research (project) in the area
3) Positioning of the research (project) in related domestic and overseas research
4) Differences from the present research project, if any research funding other than KAKENHI is continuously received for another continued
research project in FY2017 (research funding by any ministry/office, local public organization, research funding corporation, private corporation
or other bodies)
5) The specific purpose of the part the Co-Investigator (kenkyū-buntansha) is in charge of (in case the applicant entered items of work allotted in
the section "Roles" of the Application Information (to be entered in the Website))

Necessity of the Research
State the necessity and positioning of research in the light of the following:
1) State of progress of the research area as background of the research [the current state and trends in domestic and overseas research, contribution
of the applicant (international rating of research achievements)]
2) The innovative character of the research and how it was inspired
3) Expected research achievements, scientific significance and impact
4) Reasons why an application is made for Specially Promoted Research and urgency of the research

Research papers/articles of other researchers in which earlier research achievements of the applicant have been quoted
The applicant should describe concisely how his/her earlier research achievements are respectively being ranked and assessed in the main research papers/articles of other researchers in which the earlier research achievements of the applicant have been quoted (mentioning the name of the author,
the title and other matters of each research paper/article), and how they are being used.

### **Research Plan and Methods**

The applicant should provide details of the research plan and the methods for achieving the objectives of the research in a clear and specific manner. The plan should be divided into one for FY2017 and one for from FY2018 on. The existing academic literature should be referred to as needed and the plan and methods should indicate results through a discussion from multiple aspects, such as the action in the event that the research does not progress as originally planned.

Where the research plan is being implemented by a group, indicate the specific roles of the Principal Investigator and Co-Investigators (kenkyu-buntansha) (using figures, tables and other visual aids). In case the research plan is being implemented together with Co-Investigators scientific viewpoint.

(kenkyu-buntansha), include the necessity and rationality of the project members, and the connection to the purpose of the research from the Moreover, in order to clearly indicate the general view of the research team, state the roles of Co-Investigators (renkei-kenkyusha) and Research Collaborators [overseas co-researchers, company-employed researchers not eligible to apply for KAKENHI, other persons offering research support, such as technical experts and intellectual property specialists, graduate students and others (the names and the number of members may be stated)] Moreover, if the research environment changes significantly halfway through the research period, due to personnel changes, retirements, etc., the applicant should also describe the way how the location of the implementation of the research is secured, research implementation methods, etc.

State of Preparations for the Research Project and Methods to Disseminate the Research
Results to Society and Citizens
The following points should be highlighted and stated in a clear, specific manner:
1) The current state of research environment, such as research facilities, equipment and materials that are used for the implementation of the research
2) The state of preparation for starting the research, such as coordination and contact with Co-Investigators (kenkyu-buntansha), if applicable (This
should also be stated as appropriate in the event there are Co-Investigators ( <i>renkei-kenkyusha</i> ) and/or Research Collaborators.)
3) The methods and other ways of disseminating the research results of the current research to society and citizens

Research Funding Received and Achievements
State the achievements of funded research that is being effectively used for planning the current research from the grants that the Principal
Investigator/Co-Investigator (kenkyu-buntansha) has received (including KAKENHI, research funding provided by his or her research institution,
research funding paid by any ministry/office, local public organization, research promotion corporation, private corporation and any current research
funding). Classify the grants into KAKENHI and other grants. The following should be taken into account:
1) For each research funding, state the research category (name of the system for research funding other than KAKENHI), period (fiscal year), title
of the research project, whether the applicant is the Principal Investigator or Co-Investigator (kenkyu-buntansha), eligible costs (direct costs) of
the research. Also give a clear statement of the research achievements and interim and after-the-fact assessment results (only to be made by the
funding organizations). If there are research progress assessment results for KAKENHI in FY2015 or in FY2016, the applicant should describe
them in the section "Connection between the Research Plan and the Research Project which received a Research Progress Assessment" in
Specially Promoted Research 2-7.
2) Distinguish between KAKENHI and other research funding by drawing a line.

Principal Investigator of "Spe In this section the applicant sl	Investigator of the current application of the current application of the current application of the connection of the connection between the connection is the connection is the connection is the connection in the connection is the connection in the connection is the connection in the current connection of the current application in the current connection of the current application in the current connection of the current connection of the current connection of the current application in the current connection of the current current connection of the current cur	ientific Research (S)" in F ween the research plan and	Y2015 or in FY2016. I the research project which	received a research progr

Specially	Promoted	Research	2-8-0	,

The applicant should fill in this section only if he or she wishes to reconstruct her/his research plan as an application for the fiscal year before the final fiscal year of a research plan. (cf. Application Procedures for Grants-in-Aid for Scientific Research) In other cases it is not necessary to fill it in.

Entries when Applying	g for a Gra	nt for the Final Year of a Research Plan	
In this section the applicant should	describe the resea	arch achievements, such as new knowledge and other matters, attained is	
		onducting as a Principal Investigator and of which FY2017 is the final	
		nt of the research, justification of the budget, etc.) why he or she is ap	
		er original research, based on the development of the original research at are described in this section should not be described in the section	
Received and Achievements" in Spe			in Research Funding
Research Category	Project	Title of the Research Project	Research Period
2 3	Number	3	
			From FY to FY2017
Initial Research Plan a	and Researc	ch Achievements	
Reasons for Applying			

Protection of Human Rights and Compliance with Laws and Regulations (cf. Application Procedures
for Grants-in-Aid for Scientific Research)
Describe the measures and actions that you will take if your research involves compliance with the related laws and regulations (e.g. research requiring the consent and the cooperation of the other party, research requiring consideration for the handling of personal information and research requiring efforts regarding bioethics and safety measures when implementing the research plan). This applies to surveys, research, experiments which require an approval procedure in an ethics committee inside and outside the research institution, such as for example questionnaire surveys and interview surveys in which personal information is involved, the use of provided samples, analysis study of the human genome, recombinant DNA experiments, experiments on animals, etc. Please indicate where this is not applicable.
DIVA experiments, experiments on animals, etc. I lease indicate where this is not applicable.

## Research Facilities and Equipment Currently Used

Raccorch Hacility			USEU			
	<b>es</b> See the procedures for preparing	and entering		t-in-aid for Spec	ally Promoted Re	search.
Research	Name of Engilities (	(raa)	Exclusive or		Remarks	,
Institution	Name of Facilities (A	11ca)	Joint Use		Kemarks	·
<b>Equipment Curr</b>	ently Used (major existir	ng equip	ment)	•		
	reparing and entering the proposal f			oted Research.)		
				Exclusive		
Research	Name of Equipment		cations (type and	or Joint	Year of	Remarks
Institution	rame of Equipment	pe	erformance)		Installation	Kemarks
				IIco		
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#### **Rationality and Justification of the Research Costs**

In this section, the applicant should fill in the budget for each item of expense, based on the scale and the organization of the research and other matters mentioned in the section "Research Plan and Methods" in Specially Promoted Research 2-4, and should then describe the rationality, justification and grounds for the total amount. A deliberation on the optimum scale and budget of the research will be conducted in the screening panel. Therefore, the applicant should specifically enter important items and expensive items (for example, in the case of expensive equipment, reasons why its performance is necessary for the research and the reasons why the currently used equipment cannot be used, in the case of expensive consumables, the way how the money is actually used and the adequacy of the quantity and price, in the case of personnel expenditure and remuneration, the adequacy of the staff and costs, etc.). Moreover, if the total amount of the research budget applied for exceeds 500 million yen, the applicant should fill in the rationality and justification in the section "Reason why the total budget applied for exceeds 500 million yen" in Specially Promoted Research 2-13.

Moreover, in case of research plans where in any of the fiscal years any of the costs like "equipment", "travel expenses" or "personnel expenditure and remuneration" exceeds 90%, or in the case of research plans with a budget in which expense items under "Miscellaneous" account for a particularly large percentage of the budget in any single fiscal year, the applicant should provide a justification for the cost (for example by providing

### **Statement of Costs for Equipment**

If the applicant is purchasing many books and materials, he or she should enter details, such as "books relating to politics during the Middle Ages in the West", in such wording that the contents of the books and materials becomes clear. For machines and tools, not only the type but also the breakdown of each set should be stated. If the applicant needs equipment in the last fiscal year, he or she should also fill in the reason in the section for the last fiscal year. In the section "Fixed Price / Estimation", the applicant should fill in concisely the fixed price or the estimated price, in a way that clarifies the ground for the amount, such as for example by mentioning the percentage proportion of the fixed price to the estimation. Moreover, in order to facilitate deliberations on the rationality of the research funding, the applicant should fill in the estimated price, except in those cases where it is unavoidable not

to do so. (Unit: Thousands of yen) Year and Month Preferred Researcher as the main user Unit Fixed Price / Amount when Item and Specifications Qty and institution where the Order of Purchase Price (¥) Estimation items will be used is Purchase Planned FY2017 Month: Total Rationality, Justification and Other Matters FY2018 Month: Total Rationality, Justification and Other Matters

Specially Promoted Research 2-11-( )

Year and Month when Purchase is Planned	Preferred Order of Purchase	Item and Specifications	Qty	Unit Price	Amount (¥)	Fixed Price / Estimation	Researcher as the main user and institution where the items will be used
FY2019							
Month:							!
							!
							!
		Total			<del> </del>	<del>                                     </del>	
Rationality	y, Justification	n and Other Matters					
	,						
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	<del></del>		т	<del></del>	T	Т	
FY2020 Month:							
		Total					
Rationality	y, Justification	n and Other Matters					
FY2021			T	T	T	Τ	
Month:							
		Total					
Rationality	y, Justificatior	n and Other Matters					

	ement of Costs to				or "Specially Promoted I	Research"	(Unit: Thousa	ands of yen)
Fiscal Year	Consumables		Travel Ex	xpenses	Personnel Expe		Miscellaneous	
近~	Item	Amount	Item	Amount	Item	Amount	Item	Amount
017			(Domestic)					
FY2017			(Overseas)					
Desir	Total onality, Justifica	· · · · · · · · · · · · · · · · · · ·	Ott. Matter					
FY2018			(Domestic)					
FYZ	77.1		(Overseas)					
Datic	Total onality, Justifica	tion and (	Other Matter					
	Thurst, vasaries		Julier Manuel	,				

# Specially Promoted Research 2-12-( )

Fiscal Year	Consumal	bles	Travel Ex	penses	Personnel Expe		Miscella	neous
H	Item	Amount	Item	Amount	Item	Amount	Item	Amount
			(Domestic)					
6]								
FY2019								
Œ			(Overseas)					
	Total							
Ratio	onality, Justifica	tion and C	Other Matters					
			<i>a</i> 5			1		
			(Domestic)					
020								
FY2020								
щ			(Overseas)					
<u>  </u>	Total	. 1.0	21 24					
Ratic	onality, Justifica	tion and C	Other Matters					
			(Domestic)					
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_								
202								
FY2021			(Overseas)					
			(Overseus)					
	TD 4.1							
Ratio	Total onality, Justifica	tion and C	 )ther Matters					
1.1111	mancy, sustinca	alon unu (	oner maners					

ason why the total budget applied for exceeds 500 million yen s section the applicant should explain specifically the reason why he or she cannot comply with the 500 million yen limit and th cation for exceeding 500 million yen, only if the total amount of the research budget applied for exceeds 500 million yen, which e upper limit of the application.	
supper minit of the appreciation.	

Name	of	the
Resear	cher	

#### Application for Research Funding, the Current State of Funding and Effort

Since this section is the part that will be used for reference during the screening process when judging whether the research project will be able to be sufficiently implemented without causing unreasonable duplication or excessive concentration of research funding. It is necessary that the applicant correctly states the budget for the proposed research project that he or she receives and uses. The applicant should take into consideration the following points and enter (1) the research funding applied for, (2) the research funding to be provided and (3) other activities at the time of application by the Principal Investigator and the Co-Investigator(s) (kenkyū-buntansha). For the exact method for filling in the necessary data, the applicant should verify the Procedures for Preparing and Entering a Proposal for Grant-in-Aid for "Specially Promoted Research."

- 1. In the section "Effort" the applicant should fill in a percentage of time allocation (%) necessary for the implementation of the research if the entire yearly working time is set at 100%.
- 2. In the beginning of the section "Research Funding Applied For", the applicant should enter the research project he or she is currently applying for
- 3. In the case of a grant-in-aid for scientific research for "Scientific Research on Innovative Areas (Research in a proposed research area)", the applicant should state whether it is "planned research" or "invited research".
- 4. The applicant should include research funding to be competitively provided by the research institution to which he or she belongs.
- 5. In the section "Connection between the Research Project Currently Applied for and the Original Research Project", the applicant should state the reasons for I, II and III specifically and clearly.
- 6. If the applicant is participating in project research conducted in line with a specific purpose (mission) of the research institution to which he or she belongs, he or she should also enter the research funding that is delivered.
  Moreover, if the research funding that is delivered to each individual is not clear, the applicant should make a statement to this effect in the

Moreover, if the research funding that is delivered to each individual is not clear, the applicant should make a statement to this effect in the section "I. Differences in the Content of the Research".

#### (1) Research Funding Applied for Connection between the Research Project Currently Applied for Budget for FY and the Original Research Project Funding System / Name of Title of Proposed 2017 Roles I. Differences in the Content of the Research Effort Project (Name of the the Research Funding (throughout the (PI / II. Reason(s) for the Application for the Current Research Project in period) (Unit: (Research Period / Name Principal (%) Co-I(s)) Addition to the Original Research Project Thousands of of the Funding Institution) Investigator) (In the case of a Principal Investigator of a KAKENHI, the amount yen) to receive for the whole research period) Research Project Currently Applied For 'Specially Promoted Research" ) (total budget in thousands of yen) (2017-20\_ I (total budget in thousands of ven) $\Pi$ ) Ι (total budget in thousands of ven) $\Pi$ )

Application for 1 (2) Research Fund			the Curren	t State	e of Funding and Effort (Continued)
Funding System / Name of the Research Funding (Research Period / Name of the Funding Institution)		Roles	Budget for FY 2017(throughou t the period) (Unit: Thousands of yen)	Effort (%)	Connection between the Research Project Currently Applied for and the Original Research Project  I. Differences in the Content of the Research  II. Reason(s) for the Application for the Current Research Project in Addition to the Original Research Project  III. Reason(s) for Withdrawal from the Research Currently Implemented ("Scientific Research on Innovative Areas". "Scientific Research", "Challenging Exploratory Research". "Grant-in-Aid for Young Scientists") and Conducting of Research Currently Applied For
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educational activiti aforesaid research funding. applied fo Total	s ald enter the effort for the state are carried our activities carried our and research funding on (1), (2) and (3) above	t as world by means to be pr	k other than the	100 (%)	

Reason(s) why screening by an overseas researcher is not appropriate  As a general rule, the preparation of a written opinion of the screening panel by overseas researchers will be requested for all research projects of category "Specially Promoted Research". However, if the applicant judges that it is not appropriate to request it (i.e. if he or she selected "appropriate" in the section "Appropriateness of screening by an overseas researcher" among the items of application information to be entered in Website), he or she should enter the specific reasons for this. Moreover, a deliberation on the appropriateness of these reasons will be conducted the Scientific Research Grant Committee.					