S-1-1 (2) Project Description File: Japanese version (items in the attached file)

Purpose	of the	Research
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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. (Please refer to the "Rules on Screening and Assessment for Grants-in-Aid for Scientific Research ("Scientific Research", etc.)", when describing these items.)

- 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 grants in aid for scientific research is continuously received for another continued research project in FY2010 (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 FY2010 and one for FY2011. 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 (*kenkyu-buntansha*), include the necessity and rationality of the project members, and the connection to the purpose of the research from the scientific viewpoint.

In addition, 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 the grants-in-aid for scientific research, graduate students and others (the names and the number of members may be stated)].

State of Preparations for the Research Project					
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 (renkei-kenkyusha) and/or Research Collaborators.))					

Specially Promoted Research 2 – 6 –

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 grants-in-aid for scientific research, 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 grants-in-aid for scientific research 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 grants-in-aid for scientific research), period (fiscal year), title of the research project, whether the applicant is the

Principal Investigator or Co-Investigator (<i>kenkyu-buntansha</i>), eligible 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 the grant-in-aid for scientific research in the FY2008 or in FY2009, 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 grants-in-aid for scientific research and other research funding.

Connection between the Research Plan and the Research Project which received a Research Progress Assessment
• In this section the Principal Investigator of the current application should describe it if he or she received a research progress assessment as a Principal Investigator of "Specially Promoted Research", "Scientific Research (S)", or "Grant-in-Aid for Creative Scientific Research" in
FY2008 or in FY2009. • In this section the applicant should describe the connection between the research plan and the research project which received a research progress assessment (answering questions like what connection is there, how to develop the research which received a research progress assessment specifically, and other matters).

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. procedures for application). In other cases it is not necessary to fill it in.

Entries when Applying for a Grant for the Final Year of a Research Plan

In this section the applicant should describe the research achievements, such as new knowledge and other matters, attained in the original research plan of the continued research project he or she is conducting as a Principal Investigator and of which FY2010 is the final fiscal year. He or she should describe the reasons (state of the development of the research, justification of the budget, etc.) why he or she is applying for the current research and why he or she is reconstructing his/her original research, based on the development of the original research. (Moreover, research achievements of the continued research project that are described in this section should not be described in the section "Research Funding Received and Achievements" in Specially Promoted Research 2-6.)

Research	Screening	Project	Title of the Research Project	Research
Category	Division	Number		Period
				From to
				FY2010

Research	Screening	Project	little of the Research Project	Research
Category	Division	Number		Period
				From to
				FY2010
Initial Rese	arch Plan an	d Research	Achievements	
iiiiiiai itese	arcii i iaii aii	iu itesearch i	Acmevements	
Reasons for	Applying			

Protection of Human Rights and Compliance with Laws and Regulations (see procedures for application)
In this section, the applicant should describe the measures and action that he or she will take, if his/her research involves compliance with the related laws and regulations, such as research requiring the consent and the cooperation of the other party when executing the research plan, research requiring consideration for the handling of personal information and research requiring efforts regarding bioethics and safety measures. 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 in which personal information is involved, interview surveys, the use of samples provided by patients, analysis study of human genome, recombinant DNA experiments, experiments on animals, etc.
Please indicate where this is not applicable.

Research Facilities and Equipment Currently Used

Facilities Used	See the procedures for preparin	g and ente	ering the proposal for	grant-in-aid	for Specially Pr	omoted Research.)
Research Institution	Name of Facilities (Area)		Exclusive or Joint Use	Remarks		
	ties (major existing equ					
(See the procedures for	or preparing and entering the p	roposal for	r grant-in-aid for Spe	ecially Promot	ed Research.)	
Research Institution	Name of Equipment		fications (type performance)	Exclusive or Joint Use	Year of Installation	Remarks

Rationality and Justification of the Research Costs $\frac{Specially\ Promoted\ Research\ 2-1\ 1}{Costs}$

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 (whether jointly or not), 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, 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, if, in any fiscal year of the research project, any item of expense (equipment, travel expenses, personnel and suchlike) exceeds 90% of the entire research budget, or if there is any other predominant item of expense in "Miscellaneous", the applicant should provide a justification for the cost (for example by providing a breakdown).

Stat	ement of	Costs for Equipment					_
Ages i also th in the estima	n the West", the breakdown section for the	purchasing many books and materials, in such wording that the contents of the of each set should be stated. If the appute last fiscal year. In the section "Fixed a way that clarifies the ground for the on.	e books and licant needs ed Price / E	d materials be s equipment estimation",	becomes clear. in the last fisc the applicant	For machines al year, he or s should fill in tioning the per	and tools, not only the type but she should also fill in the reason concisely the fixed price or the
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
FY2010 Month:							
		Total					
Rational	ity, Justifica	tion and Other Matters					
FY2011 Month:							
		Total					
Rational	ity, Justifica	tion and Other Matters					

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			
FY2012 Month:										
		Total								
Rationality, Justification and Other Matters										
FY2013										
Month:										
	,	Total								
Rational	ity, Justifica	tion and Other Matters								
FY2014 Month:										
Montn.										
		Total								
Rational	ity, Justifica	tion and Other Matters								

(See	e the procedures for nit: Thousands	preparing			e r Items or grant-in-aid for Spec	cially Promoted	Research.)	
Year	Consumables		Travel Expenses		Personnel (Te Assistant, Labor		Miscellaneous	
Fiscal Year	Item	Amount	Item	Amount	Item	Amount	Item	Amount
010			(Domestic)					
FY2010			(Overseas)					
	Total onality, Justifi							
		T	[(D))					
FY2011			(Overseas)					
	Total							
Rati	onality, Justifi	cation ar	nd Other Ma	tters				

		T. T.		I	
		(Domestic)			
)12					
FY2012					
H		(Overseas)			
	Total				
Ratio	onality, Justification	and Other Mat	tters		
		(Domestic)			
		, , , , , , , , , , , , , , , , , , , ,			
)13					
FY2013		(Overseas)			
ĮΤ					
	Total				
Ratio	onality, Justification	and Other Mat	tors		
Itati	onancy, o dscincation	and Other Mai	00018		
		(Domestic)			
		(Domestic)			
14					
FY2014		(0)			
FY		(Overseas)			
	Total				
Ratio	onality, Justification	and Other Mat	tters		

Reason why the total budget applied for exceeds 500 million yen
In this section the applicant should explain specifically the reason why he or she cannot comply with the 500 million yen limit and the rationality and justification for exceeding 500 million yen, only if the total amount of the research budget applied for exceeds 500 million yen, which is the guideline for the upper limit of the application.

Researcher

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

Since this section is the part that will be used for reference 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 the proposal for grant-in-aid for Specially Promoted Research.

- 1. In the beginning of the section "Research Funding Applied For", the applicant should enter the research project he or she is currently applying for.
- 2. In the case of a grant-in-aid for scientific research for "Scientific Research on Innovative Areas (Research in a proposed research area)" or "Scientific Research on Priority Areas", the applicant should state whether it is "planned research" or "invited research".
- 3. The applicant should include research funding to be competitively provided by the research institution to which he or she belongs.
- 4. 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%.
- 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.

state the reasons i	for i, if and iff specific	any and c	clearly.)		
(1) Research Funding Applied For							
Funding System / Name of the Research Funding (Research Period / Name of the Funding Institution)	Fitle of Proposed Project (Name of the Principal Investigator)	Roles (PI / Co-I(s))	Budget for FY 2010 (throughout the period) (in 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		
Research Project Currently Applied For "Specially Promoted Research" (2010-20)							
					I		
					п		
					I		
					п		

Application for Research Funding, the Current State of Funding and Effort (Continued)							
(2) Research Funding to be Provided							
Funding System / Name of the Research Funding	Title of Proposed Project (Name of the Principal	Roles (PI / Co-I(s))	Budget for FY 2010 (throughout the period) (in 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 on Priority Areas", "Scientific Research", "Challenging Exploratory Research", "Grant-in-Aid for Young Scientists", "Grant-in-Aid for Creative Scientific Research") and Conducting of Research Currently Applied For		
					I		
					п		
					Ш		
					I		
					п		
					Ш		
(3) Other Activities The applicant should enter the effort for research activities and educational activities that are carried out as work other than the aforesaid research activities carried out by means of research funding				100 (%)			
Total (Total of the effort in (1), (2) and (3) above)							

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 the category "Specially Promoted Research". However, if the applicant judges that it is not appropriate to request it (i.e. if he or she selected "Applies" in the section "If screening by an overseas researcher is not appropriate" among the items of application information to be entered in the Website), he or she should enter the specific reason for this. Moreover, a deliberation on the appropriateness of this reason (these reasons) will be conducted in the Scientific Research Grant Committee.