## **Purpose of the Research**

The applicant shall indicate the general nature of the research and the specific purpose of the research, <u>after succinctly summarizing it and providing an outline at the beginning</u>, and with the existing academic literature referred to where necessary. In particular, details shall be given clearly with a focus on the following points. [Refer to the rules relating to the screening and evaluation for grants-in-aid for scientific research.]

- 1) Scientific background for the research (e.g., domestic and overseas trends related to the research and positioning of the research; how the applicant has reached the concept based on his or her achievements in earlier research work; and details of achievements in past research work where the purpose of this project is to attain a greater level of knowledge in a similar area)
- 2) What will be elucidated and to what extent will it be pursued during the research period
- 3) Scientific characteristics, originality and expected results and significance of the research in the area
- 4) Differences in goals if you have applied for a grant for another research project falling into Scientific Research (A) that is associated with the present research; or differences in details of the research if you have applied for a grant for another research project falling into Scientific Research (A) that is not associated with the present research

`	(11) that is not associated t			J
Purpose of the R	esearch (Outline)	* Concerning the Purpose of the	Research Project, the applica	nt should succinctly summarize and
describe in detail.	(		applica	January Summer and
aescribe in actan.				
Name of			Name of	
the research institution				
the research institution			the Principal Investigator	

	Scientific Research 5-2
Purpose of the Research (continued)	

	Research Plan and Method
(	The applicant should provide details of the research plan and the method for achieving the objectives of the research in a clear and specific
l	manner, after succinctly summarizing it and providing an outline at the beginning. The plan should be divided into one for FY2012 and one for
l	FY2013. The literature should be referred to as needed and main points should be highlighted. The plan and methods should indicate
l	achievements through a discussion from_different angles, such as action to be taken in the event that the research does not progress as originally
1	

achievements through a discussion from\_different angles, such as action to be taken 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 the Co-investigator (kenkyu-buntansha) of the research team (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 relationship 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 KAKENHI, graduate students and others (the names and the number of members may be stated)].

				)
	d Method (Outline) ummarize and describe in detail.	*Concerning the Research P	lan and Method to accomplis	h the Purpose of the Research, the
apprenie silvana succincel, s	unia de una describe in deum			
Name of			Name of	
the research institution			the Principal Investigator	

Research Plan and Method (continued)					

			Belefitific Research 5-5
Dogowah Dlan a	Mothed (continued)		
Nesearch Plan and	d Method (continued)		
Nama of		N. C	
Name of		Name of	
the research institution		the Principal Investigator	

			<u>S</u>	Scientific Research S-6
State of Pre	parations for	the Research	Plan and Methods to Disseminate the	e Research Results to
1) The current sta 2) The state of p (kenkyu-bunta Collaborators	points should be high ate of research envirted are paration for start start (This should be a considered and the considered are	ironment, such as reseating the research, such a dalso be stated if appropriate appropriate the state of the	a clear and specific manner:  arch facilities, equipment and materials that are to be used as coordination and contact with project members, in car  copriate in the case that there are Co-Investigators (renk  society and members of the public	ase there are Co-Investigator(s)
	1100		e Final Year of a Research Plan	
The applicant she participates as the reasons for the n	ould indicate the in the Principal Investi the application based the research a	nitial research plan of igator. The applicant seed on a reconstruction	nts. (see procedures for application)] a continued research project having FY2012 as the fin should also state new findings in the research and oth (e.g., the degree to which the research has been develontinued research project stated here in <i>Research funding</i>	ner research achievements and loped and a justification of the
Research Category	Screening Division	Project Number	Title of Research Project	Research Period
				From FY_ to FY2012
Initial Resea	rch Plan and	Results		-
Reasons for A	Applying			

Research Funding	Received and Achievements					
_	of funded research that is being used for planning	ng the current research fro	om the grants that the Principal Investigator /			
Co-Investigator (kenkyu-buntansha) has received (including KAKENHI, research funding provided by his or her research institution, research						
	inistry/office, local public organization, research					
	ants into KAKENHI and others. The following sl					
	nding, state the research category (name of the					
	project, whether the applicant is the Principal I					
	clear statement of the research achievements a					
	s). (If there are research progress assessment resu					
II	ion between the Research Plan and the Research		-			
Research S-9.)						
2) The applicant should	describe them and make a distinction by drawing	g a line between KAKENH	I and other research funding.			
Nama of		N				
Name of		Name of				
the research institution	1	the Principal Investigator				

Research Funding Received and Achievements (continued)					

Connection between the Research Plan and the Research Project which received a Research Progres
Assessment
If the Principal Investigator of the current application received a research progress assessment in FY2010 or in FY2011, as a Principal Investigator of "Specially Promoted Research", "Scientific Research (S)", "Grant-in-Aid for Young Scientists (S)" or "Grant-in-Aid for Creative Scientific Research", he or she should describe it in this section.      The researcher should describe the connection between the research plan and the research project which received a research progress assessment in this section (e.g. what kind of connection is there, how the researcher will advance the research which received a research progress assessment in concrete terms, etc.).
Name of Name of

the Principal Investigator

the research institution

Scientifi	ic Research S-10
Protection of Human Rights and Compliance with Laws and Regulations (see procedures	for application.)
Describe the measures and actions that you will take if your research involves compliance with the related laws and reg	
, , , , , , , , , , , , , , , , , , , ,	, <u> </u>
requiring the consent and the cooperation of the other party when implementing the research plan, research requiring	
handling of personal information and research requiring efforts regarding bioethics and safety measures). This applies	s 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 provided samples, analys	
	is study of the framula
genome, recombinant DNA experiments, experiments on animals, etc. Please indicate where this is not applicable.	J
Rationality and Justification of the Research Costs	
The applicant should explain the rationality, necessity and grounds for calculating the research costs to be stated on thereafter, based on the scale and organization of the research given in <i>Research Plan and Methods</i> . Indicate the new breakdown) if, in any fiscal year of the research project, any of the costs (equipment, travel expenses and person remuneration) exceeds 90% of the entire research funding, or if there is any other predominant cost.	cessity of the cost (e.g.
thereafter, based on the scale and organization of the research given in Research Plan and Methods. Indicate the nec	cessity of the cost (e.g.
thereafter, based on the scale and organization of the research given in <i>Research Plan and Methods</i> . Indicate the new breakdown) if, in any fiscal year of the research project, any of the costs (equipment, travel expenses and personal p	cessity of the cost (e.g.
thereafter, based on the scale and organization of the research given in <i>Research Plan and Methods</i> . Indicate the new breakdown) if, in any fiscal year of the research project, any of the costs (equipment, travel expenses and personal p	cessity of the cost (e.g.
thereafter, based on the scale and organization of the research given in <i>Research Plan and Methods</i> . Indicate the new breakdown) if, in any fiscal year of the research project, any of the costs (equipment, travel expenses and personal p	cessity of the cost (e.g.
thereafter, based on the scale and organization of the research given in <i>Research Plan and Methods</i> . Indicate the new breakdown) if, in any fiscal year of the research project, any of the costs (equipment, travel expenses and personal p	cessity of the cost (e.g.
thereafter, based on the scale and organization of the research given in <i>Research Plan and Methods</i> . Indicate the new breakdown) if, in any fiscal year of the research project, any of the costs (equipment, travel expenses and personal p	cessity of the cost (e.g.
thereafter, based on the scale and organization of the research given in <i>Research Plan and Methods</i> . Indicate the new breakdown) if, in any fiscal year of the research project, any of the costs (equipment, travel expenses and personal p	cessity of the cost (e.g.
thereafter, based on the scale and organization of the research given in <i>Research Plan and Methods</i> . Indicate the new breakdown) if, in any fiscal year of the research project, any of the costs (equipment, travel expenses and personal p	cessity of the cost (e.g.
thereafter, based on the scale and organization of the research given in <i>Research Plan and Methods</i> . Indicate the new breakdown) if, in any fiscal year of the research project, any of the costs (equipment, travel expenses and personal p	cessity of the cost (e.g.
thereafter, based on the scale and organization of the research given in <i>Research Plan and Methods</i> . Indicate the new breakdown) if, in any fiscal year of the research project, any of the costs (equipment, travel expenses and personal p	cessity of the cost (e.g.
thereafter, based on the scale and organization of the research given in <i>Research Plan and Methods</i> . Indicate the new breakdown) if, in any fiscal year of the research project, any of the costs (equipment, travel expenses and personal p	cessity of the cost (e.g.
thereafter, based on the scale and organization of the research given in <i>Research Plan and Methods</i> . Indicate the new breakdown) if, in any fiscal year of the research project, any of the costs (equipment, travel expenses and personal p	cessity of the cost (e.g.
thereafter, based on the scale and organization of the research given in <i>Research Plan and Methods</i> . Indicate the new breakdown) if, in any fiscal year of the research project, any of the costs (equipment, travel expenses and personal p	cessity of the cost (e.g.
thereafter, based on the scale and organization of the research given in <i>Research Plan and Methods</i> . Indicate the new breakdown) if, in any fiscal year of the research project, any of the costs (equipment, travel expenses and personal p	cessity of the cost (e.g.
thereafter, based on the scale and organization of the research given in <i>Research Plan and Methods</i> . Indicate the new breakdown) if, in any fiscal year of the research project, any of the costs (equipment, travel expenses and personal p	cessity of the cost (e.g.
thereafter, based on the scale and organization of the research given in <i>Research Plan and Methods</i> . Indicate the new breakdown) if, in any fiscal year of the research project, any of the costs (equipment, travel expenses and personal p	cessity of the cost (e.g.
thereafter, based on the scale and organization of the research given in <i>Research Plan and Methods</i> . Indicate the new breakdown) if, in any fiscal year of the research project, any of the costs (equipment, travel expenses and personal p	cessity of the cost (e.g.
thereafter, based on the scale and organization of the research given in <i>Research Plan and Methods</i> . Indicate the new breakdown) if, in any fiscal year of the research project, any of the costs (equipment, travel expenses and personal p	cessity of the cost (e.g.
thereafter, based on the scale and organization of the research given in <i>Research Plan and Methods</i> . Indicate the new breakdown) if, in any fiscal year of the research project, any of the costs (equipment, travel expenses and personal p	cessity of the cost (e.g.
thereafter, based on the scale and organization of the research given in <i>Research Plan and Methods</i> . Indicate the new breakdown) if, in any fiscal year of the research project, any of the costs (equipment, travel expenses and personal p	cessity of the cost (e.g.
thereafter, based on the scale and organization of the research given in <i>Research Plan and Methods</i> . Indicate the new breakdown) if, in any fiscal year of the research project, any of the costs (equipment, travel expenses and personal p	cessity of the cost (e.g.
thereafter, based on the scale and organization of the research given in <i>Research Plan and Methods</i> . Indicate the new breakdown) if, in any fiscal year of the research project, any of the costs (equipment, travel expenses and personal p	cessity of the cost (e.g.
thereafter, based on the scale and organization of the research given in <i>Research Plan and Methods</i> . Indicate the new breakdown) if, in any fiscal year of the research project, any of the costs (equipment, travel expenses and personal p	cessity of the cost (e.g.
thereafter, based on the scale and organization of the research given in <i>Research Plan and Methods</i> . Indicate the new breakdown) if, in any fiscal year of the research project, any of the costs (equipment, travel expenses and personal p	cessity of the cost (e.g.
thereafter, based on the scale and organization of the research given in <i>Research Plan and Methods</i> . Indicate the new breakdown) if, in any fiscal year of the research project, any of the costs (equipment, travel expenses and personal p	cessity of the cost (e.g.
thereafter, based on the scale and organization of the research given in <i>Research Plan and Methods</i> . Indicate the new breakdown) if, in any fiscal year of the research project, any of the costs (equipment, travel expenses and personal p	cessity of the cost (e.g.
thereafter, based on the scale and organization of the research given in <i>Research Plan and Methods</i> . Indicate the new breakdown) if, in any fiscal year of the research project, any of the costs (equipment, travel expenses and personal p	cessity of the cost (e.g.
thereafter, based on the scale and organization of the research given in <i>Research Plan and Methods</i> . Indicate the new breakdown) if, in any fiscal year of the research project, any of the costs (equipment, travel expenses and personal p	cessity of the cost (e.g.
thereafter, based on the scale and organization of the research given in <i>Research Plan and Methods</i> . Indicate the new breakdown) if, in any fiscal year of the research project, any of the costs (equipment, travel expenses and personal p	cessity of the cost (e.g.
thereafter, based on the scale and organization of the research given in <i>Research Plan and Methods</i> . Indicate the new breakdown) if, in any fiscal year of the research project, any of the costs (equipment, travel expenses and personal p	cessity of the cost (e.g.

Major Equipment Currently Used (See preparation and entry procedures of proposal for grant-in-aid for Scientific Research (S).)									
Major	<u>Equip</u> i	ment Currently Use	(See pre	paration and e	ntry procedu	res of proposal f	tor grant-in-aid	for Scientific	Research (S).)
Research Equipment		Specifications (type and performance)		Exclusive/ Joint Use	FY of Installation	R	emarks		
1115(1)	ution		1	CITOIIIIaiic		Joint Osc	instanation		
Staton	nont of	Costs for Earling	ont o	41 1	<i>C</i>	diamental de la companya de la compa	- 41 '	£ · ·	-:4 £- 0 :
		Costs for Equipment: Thousands of yen)	ciii (See	me procedure	s for prepar	ing and enterin	g the proposal	ior grant-in	-aid for Scientific
			04	Unit	Amount	Names	s of Main U	Jsers	When to
FY	Items	and Specifications	Qty	Price	(¥)		ner and Inst		Purchase
2012									
Name of	ala imagistasi				Name of	17			
the resear	ch institution	n			the Princip	oal Investigator			

(See the pr	rocedure for prepari	ng and enterir	ng the proposal for gra	int-in-aid for S			nds of yen)	20112
FY	Consumables		Travel Exp		Personnel Expendence Remunerat	ion	Miscellaneous	
	Item	Amount (¥)	Item	Amount (¥)	Item	Amount (¥)	Item	Amoun (¥)
			(Domestic)					
2012			(Overseas)					
	Total		Total		Total		Total	
			(Domestic)					
2013			(Overseas)					
	Total		Total		Total		Total	
			(Domestic)					
2014			(Overseas)					
	Total		Total		Total		Total	
			(Domestic)					
2015			(Overseas)					
	Total		Total		Total		Total	
			(Domestic)					
2016			(Overseas)					
	Total		Total		Total		Total	

# <u>Scientific Research S-13</u> <u>Proposal of the Researcher Conducting Scientific Research (S) for FY2012</u>

	Name						Date of Birth (age)		(_	years old)
Researcher	Institution, Academic Unit, Position				Academic Degree			Field of Specialization		
Recent R	Research Activ	vitios								
			ay rasaarah na	nars/artialas haaks	(avaluding t	ovthoo	ka abatraata	of acadomic mostiv	ac and	summeries of
	The applicant shall enter his or her key research papers/articles, books (excluding textbooks, abstracts of academic meetings and summaries of lectures), industrial property rights and invited lectures in the sequence of publication from new to old with serial numbers assigned. Forthcoming									
				-	-			im seriai numbers a	ssigne	i. Forthcoming
				ncluded, if they have				4:		
				icles, Titles of						
				the names of authors		-				
				e mentioned sequen			-	-		
Only include	some authors omitt	tting oth	ners, if there are	e many authors (if ar	y authors' na	mes ar	e omitted, sta	te the number of the	author	rs and the order
on the auth	or list for the rel	lated r	esearchers). T	he Principal Invest	igator should	d be	marked with	a double underlin	ne, Co	-Investigator(s)
(kenkyu-bunt	ansha) with a single	le under	line, and the Co	o-Investigator(s) (ren	ikei-kenkyush	a) wit	h a dotted und	derline.		
							1			
Name of					Name of					
the research in	stitution				the Princ	ipal Inv	estigator			
						•	-			

Scientific Research S-14 **Recent Research Activities (continued)** 

To be filled in and attached to the proposal for grant-in-aid for each Principal Investigator and Co-Investigator (*kenkyu-buntansha*)

## Scientific Research S-15

Name of					
Application for Researcher	arch Funding, the Curi	ont State	o of Fundin	a and I	Effort
Since examiners will refer to be sufficiently implemented applicant correctly states the Co-Investigator (kenkyu-bungranted and (3) other activities more than one. For the exthe proposal for grant-in-aid 1) Fill in Effort with a petime is set at 100%.  2) State the title of the result in the case of a KAKE on Priority Areas", the 4) Include research funding	the information stated here in the without causing unreasonable due budget for the proposed resetansha) should take into account es at the time of application by the act method for filling in the nece for Scientific Research S. creentage of time allocation (%) nearch project at the beginning of a splicant should state whether it ing to be competitively provided by	e collegial so plication or arch project the followin e Principal In ssary data, the eccessary for Research Fu nnovative A	creening when the excessive concet that he or she g: (1) research finvestigator. Distributed in the implemental and in the implemental an	ey discuss ntration of receives unding undinguish be uld verify tion of the r. n a proposited resear	s whether a research project will be able to f research funding. It is necessary that the and uses. The Principal Investigator or der application, (2) research funding to be tween sources of research funding, if there the procedures for preparing and entering research where the entire yearly working sed research area)" or "Scientific Research rech".
(1) Research Funding	T * *	Role	Pudget for EV2012	I = 22	T
Funding system and name of the research funding (research period and name of the funding organization	Title of the research project (name of the Principal Investigator)	Role (Principal Investigator or Co-Investiga tor (kenkyu-bun tansha))	Budget for FY2012 (throughout the period) (thousands of yen)	Effort (%)	Differences in details of research and reasons for additional application for a grant for the current research project (In the case of a Principal Investigator (or a researcher who receives the grant for the whole program, like, for example, the Project Leader), the amount to receive for the whole research period (or for the whole program) should be entered)
Research project for which a grant is applied Scientific Research (S) (2012)					
Name of			Name of		

the Principal Investigator

the research institution

To be filled in and attached to the proposal for grant-in-aid for each Principal Investigator and Co-Investigator (*kenkyu-buntansha*)

Application for Research Funding, Current State of funding and Effort (continued)								
(2) Research Funding		Role	D. J. (C	7.7	Difference in 1 ( ) C			
Funding system and name of	Title of the research project	(Principal	Budget for FY2012	Effort	Differences in details of research and reasons for additional application for a			
the research funding (research period and name of the	(name of the Principal	Investigator	(throughout	(%)	grant for the current research project			
funding organization	Investigator)	or Co-Investig	the period)		(In the case of a Principal Investigator (or a researcher who receives the grant for the whole program, like, for example, the			
runding organization		ator (kenkyu-bu	(thousands of yen)		Project Leader), the amount to receive for the whole research period			
		ntansha))	<i>y</i> •••• <i>y</i>		(or for the whole program) should be entered)			
(3) Other activities								
	esearch and educational activities							
	aid research activities under appli							
Total	TI	100						
(Total of the effort in (1), (2) as	nd (3) above)	(%)						
(-), (=)	× / /	\ -7						