#### **Purpose of the Research**

The applicant shall indicate the general nature of the research and the specific purpose of the research, after succinctly summarizing it and providing an outline at the beginning, 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 concerning the screening and assessment for Grants-in-Aid for Scientific Research. (cf. Application Procedures for Grants-in-Aid for Scientific Research)]

1) Scientific background of 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 past research work; and details of achievements of past research work where the purpose is to attain a greater level of sophistication)

		*Concerning the Purpose of the Research Project, the applicant should succinctly summariz
nd describe in detail.	 ( Same)	
iu deserroe in dealin		

**Grant-in-Aid for Young Scientists B - 2 Purpose of the Research (continued)** 

#### **Research Plan and Methods**

The applicant should provide details of the research plan and the methods for achieving the objectives of the research, after succinctly summarizing it and providing an outline at the beginning. The plan should be divided into one for FY2017 and one for from FY2018 on. The literature should be referred to as needed. The plan and methods should indicate achievements through a discussion from multiple aspects, such as the action in the event that the research does not progress as originally planned. In addition, the following points should be highlighted.

- 1) Specific devices for implementing the research (such as ideas for effectively advancing the research and the assistance of Research Collaborators for effectively advancing the research)
- 2) Where the research is being implemented by a research team, the specific roles (using figures, tables and other visual aids) of the Principal Investigator, and if necessary, the 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 (names and number of members may be stated)]
- 3) If the Principal Investigator is employed in conducting other research work or if the Principal Investigator has other research work that is not

an occupational task, connection with and differences from the present research
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.
Research Plan and Method (Outline) * Concerning the Research Plan and Method to accomplish the Purpose of the Research,
the applicant should succinctly summarize and describe in detail.

**Grant-in-Aid for Young Scientists B - 4 Research Plan and Methods (continued)** 

State of Preparations for the Research Plan and Methods to Disseminate the Research
Results to Society and Citizens
The following points should be highlighted and stated in a concrete and clear 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 as needed, such as coordination and contact with Research Collaborators, if applicable
3) How the research achievements are disseminated to society and people
7 1 1
Brief Background Description of Research of the Applicant
Brief Background Description of Research of the Applicant  State the background history of research in the sequence from new to old, starting from the graduation of the final education. Clearly indicate
State the background history of research in the sequence from new to old, starting from the graduation of the final education. Clearly indicate
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#### **Research Achievements**

The applicant should fill in the important **research papers/articles**, **books**, **industrial property rights and invited lectures** the Principal Investigator presented up to the present relating to the research in the sequence of publication from new to old with serial numbers assigned. Lines should be drawn between groups of research papers and others published in the same calendar year to separate them. (<u>The lines can be moved</u>.) Forthcoming research papers/articles in academic journals may be included, only if they have been accepted for publication.

Moreover, enter research achievements focusing primarily on achievements from 2012 onward. It is also acceptable to enter research paper or other achievement (up to ten items), which are closely related to the current research, or which are key ones that you published up to the present, even if they were published before 2012.

- 1) For published research papers/articles, state the title, the names of authors, name of the journal, referee reading (or not), volume, page numbers of the initial and final pages and the year of publication.
- 2) The abovementioned sequence of such items is not compulsory as long as all of the items are included. If there are many authors, only include several authors omitting others (if any authors' names are omitted, state the number of the authors and the order on the author list for the related researchers). The Principal Investigator should be marked with an underline.

the related researchers). The Principal Investigator should be marked with an underline.					
2016 onward					
2015					
2014					

Research Achievements (continued)	
2013	
2012	
2012	
before 2011	
001010 2011	

Connection between the Research Plan and the Research Project which received a Research Progress Assessment  If the Principal Investigator of the current application received a research progress assessment in FV2015 or in FV2016, as a Principal Investigator of "Specially Promoted Research" or "Scientific Research (S)", he or she should describe it in this section.  The researcher should describe the connection between the research glant 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 connecte torus, etc.)	Research Progress Assessment  If the Principal Investigator of the current application received a research progress assessment in FY2015 or in FY2016, as a Principal Investigator of "Specially Promoted Research" or "Scientific Research (S)", 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
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progress assessment in convrete terms, etc.).	progress assessment in concrete terms, etc.).

Giai	t-m-Alu for foung Scienusts D - 9
Protection of Human Rights and Compliance with Laws	and Regulations (cf. Application
Troccuon of framan Rights and Comphanic with Laws	and Regulations (ci. 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	
research requiring efforts regarding bioethics and safety measures when implementing the res	earch 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 u	
human genome, recombinant DNA experiments, experiments on animals, etc. Please indicate who	ere this is not applicable.
Rationality and Justification of the Research Costs	,
The applicant should fill in the rationality, necessity and grounds for calculating the research thereafter, based on the scale and organization of the research given in <i>Research Plan and M</i> breakdown) if, in case of research plans where in any of the fiscal years any of the costs like expenditure and remuneration" exceeds 90% or in the case of research plans with a budget in	ethods. Indicate the necessity of the cost (e.g. "equipment", "travel expenses" or "personnel
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# Grant-in-Aid for Young Scientists B - 10 (Unit: thousands of you)

_		(Unit: thousands of yen)			
Staten	nent of Costs for Equipment		Statement of Costs for Consuma		
	cedures for Preparing and Entering a Proposal for Gra	ant-in-Aid for			
"Grant-ir	n-Aid for Young Scientists (B)"		Grant-in-Aid for "Grant-in-Aid for Young Scie	entists (B)"	
FY	Item and Specifications (Unit price × qty) (Institution where equipment is to be installed)	Amount (¥)	Item	Amount (¥)	
2017					
				1	

(Unit: thousands of yen)

	Domestic Travel Expenses		Overseas Travel Expenses		Personnel Exp and Remun	penditure eration	Miscellaneous	
	Item	Amount	Item	Amount	Item	Amount	Item	Amou
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#### Application for Research Funding, Current State of Funding and Effort

Since examiners will refer to the information stated here in the second screening (collegial screening) when they discuss whether a 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. Distinguish between sources of research funding by drawing a line, if there is more than one. 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 "Grant-in-Aid for Young Scientists (B)".

- 1) Fill in Effort with a percentage of time allocation (%) necessary for the implementation of the research where the entire yearly working time is set at 100%.
- 2) State the title of the research project at the beginning of Research Funding Applied for.
- 3) In the case of a KAKENHI for "Scientific Research on Innovative Areas (Research in a proposed research area)", the applicant should state whether it is "planned research" or "invited research".

	g to be competitively provided	by the research in	istitution to which	ch the res	searcher belongs.	
(1) Research Funding	g Applied for					
Funding system and name of	Title of the research project	Role	Budget for	Effort	Differences in details of research and	
the research funding (research	(name of the Principal	(Principal Investigator or	FY2017	(%)	reasons for additional application for a	
period and name of the funding	Investigator)		(throughout the period)		grant for the current research project	
organization	,	Co-Investigator (kenkyu-buntans	(Unit:		(In the case of a Principal Investigator of a	
		ha))	Thousands of		KAKENHI, the amount to receive for the	
		//	yen)		whole research period)	
Research project for						
which a grant is applied		Principal				
Grant-in-Aid for Young		Investigator				
Scientists (B)		in , usugutor	( )		(total budget in thousands of yen	
(2017)			,			

Application for Research Funding, Current State of Funding and Effort (continued)						
(2) Research Funding	to be Provided					
Funding system and name of	Title of the research project	Role (Principal	Budget for	Effort	Differences in details of research and	
the research funding (research	(name of the Principal	Investigator or	FY2017	(%)	reasons for additional application for a grant	
period and name of the funding		Co-Investigator (kenkyu-buntans	(throughout the period)		for the current research project	
organization		(kenkyu-bumans ha))	(Unit:		(In the case of a Principal Investigator of a	
		,,,,,	Thousands of		KAKENHI, the amount to receive for the	
			yen)		whole research period)	
(2) O4lage: A =42 *44	<u> </u>	<u> </u>	<u> </u>			
(3) Other Activities						
	earch and educational activit					
	research activities under app	lication or to be fu	ınded.	100		
Total				100 (%)		
Total of the effort in (1), (2) and (3) above						