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</u> <u>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 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)
- 2) What will be elucidated and to what extent will it be pursued during the research period

3) Scientific characteristics, originality and expected achievements and significance of the research in the area

Purpose of the Research (Outline) * Concerning the Purpose of the Research Project, the applicant should succinctly summarize and describe in detail.

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, <u>after succinctly</u> <u>summarizing it and providing an outline at the beginning</u>. The plan should be divided into one for FY2015 and one for from FY2016 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.

Research Plan and Methods (continued)

若手研究は、研究代表者一人で行う研究であるが、 研究分担者、連携研究者の業績も記述可能な指示書きに なっていたため、該当箇所を削除

Grant-in-Aid for Young Scientists B-5

Research Achievements

| Nescui en Mente venients |
|---|
| The applicant should fill in the important research papers/articles, books, industrial property rights and invited lectures the Principal |
| Investigator and Co-Investigator(s) (kenkyū-buntansha) 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. (The lines can be moved.) Forthcoming research papers/articles in academic journals may be included, only if they have |
| been accepted for publication. |
| In addition, if the need arises, it is also possible to fill in the recent research activities of the Co-Investigators (rankai-kanbusha). If the recent |

In a research activities are filled in, double lines should be drawn to distinguish between them. (The double lines can be moved.) They should be filled in per researcher in the sequence of publication from new to old. (It is not necessary to draw lines between every year.)

Moreover, enter research achievements focusing primarily on achievements from 2010 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 2010.

- 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 double-underline, Co-Investigator(s) (kenkyu-buntansha) with a single underline, and the Co-Investigator(s) (renkei-kenkyusha) with a dotted underline.

2014 onward

2013

2012

| Research | Achievements | (continued) |
|----------|--------------|-------------|
|----------|--------------|-------------|

2011

2010

before 2009

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 FY2013 or in FY2014, as a Principal Investigator of "Specially Promoted Research", "Scientific Research (S)" or "Grant-in-Aid for Young Scientists (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 progress assessment in concrete terms, etc.).

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 applicable3) How the research achievements are disseminated to society and people

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 details of the research and noteworthy matters (e.g., awards).

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.

Rationality and Justification of the Research Costs

The applicant should fill in the rationality, necessity and grounds for calculating the research costs to be stated on the following page and thereafter, based on the scale and organization of the research given in *Research Plan and Methods*. Indicate the necessity of the cost (e.g. breakdown) if, 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.

Grant-in-Aid for Young Scientists B - 9 (Unit: thousands of yen)

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| Statement of Costs for Equipment | | | Statement of Costs for Consuma | |
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| Grant-In-A | | | Grant-III-AIU IOI Grant-III-AIU IOF FOUND SCIE | entists (D) |
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Statement of Costs for Travel Expenses See Procedures for Preparing and Entering a Proposal for Grant-in-Aid for "Grant-in-Aid for Young Scientists (B)" Personnel Expenditure and Remuneration Domestic Travel **Overseas Travel** Miscellaneous Expenses Expenses FY Item Item Item Amount Amount Amount Amount Item 2015

(Unit: thousands of yen)

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".
- 4) Include research funding to be competitively provided by the research institution to which the researcher belongs.

(1) Research Funding Applied for Role Budget for Differences in details of research and Funding system and name of Title of the research project Effort (Principal FY2015 reasons for additional application for a the research funding (research (name of the Principal (%) Investigator or (throughout grant for the current research project period and name of the funding Investigator) Co-Investigator the period) (In the case of a Principal Investigator of a organization (kenkyu-buntans (Unit: KAKENHI, the amount to receive for the Thousands of ha))whole research period) yen) Research project for which a grant is applied Principal Grant-in-Aid for Young Investigator Scientists (B) (total budget in thousands of ven) () (2015-)

| (2) Research Funding to be Provided unding system and and of the for seven provide interest provide interest provided interest | Grant-m-Ald for Toung Scientists D - 1 | | | | | | | | | |
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