

# How to write strong KAKENHI proposals



**KAKENHI Seminar, HU, 2017.10.03**



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# Previous successful KAKENHI proposals... 😊

FY2016: KAKENHI A, “Projecting discharge from the Greenland ice sheet using climatic forcings derived from atmosphere-ocean models”.

¥22,900,000 (4 years).

FY2010: KAKENHI A, “Simulations of the evolution and dynamics of the Antarctic ice sheet in past and future climates”.

¥28,300,000 (4 years).

FY2006: KAKENHI B, “Induced anisotropy, fast ice flow and climate change in ice sheets”.

¥10,300,000 (3 years).

## ... and failed ones ... ☹️

FY2015: KAKENHI B, “Projecting discharge from the Greenland ice sheet using climatic forcings derived from atmosphere-ocean models”.

¥16,840,000 requested (4 years).

FY2009: KAKENHI A, “Simulations of the evolution and dynamics of the Antarctic ice sheet in past and future climates”.

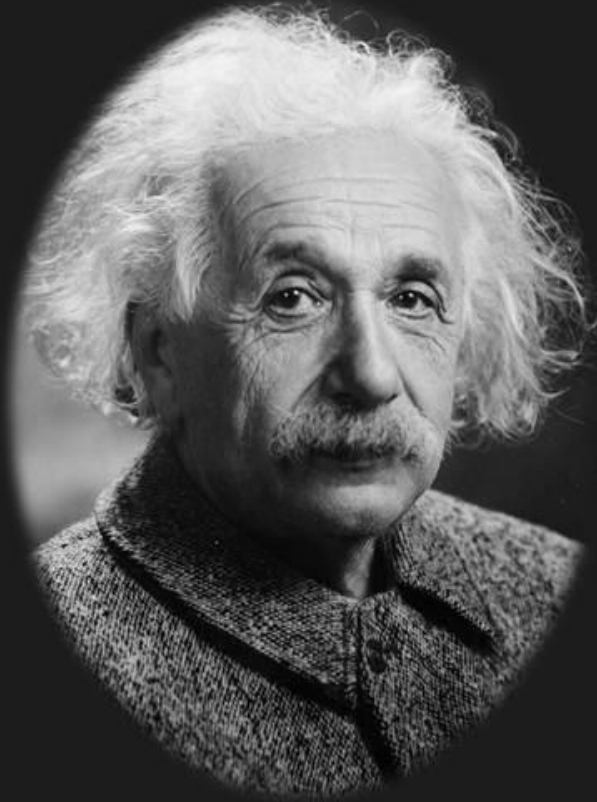
¥48,300,000 requested (4 years).

FY2005: KAKENHI C, “Evolution and dynamics of the Martian polar ice caps over climate cycles”.

¥4,700,000 requested (2 years).

**Some patience and persistence is needed!**

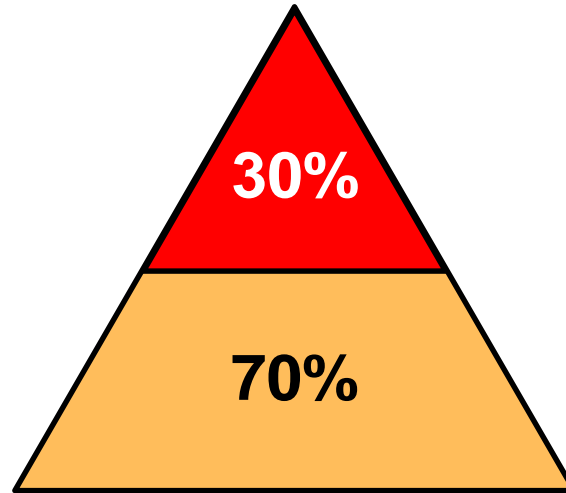
Failure is success in progress



Failure is  
success in progress

# Reviewer evaluation process – some thoughts

**Top 30% is good enough!**



Don't need to be No. 1.

However, your proposal must be categorized as “great”.

# Reviewer evaluation process – some thoughts

## Reviewers are busy:

In 2015, each reviewer checked about 70 proposals within 40 days (for Kiban A/B/C, Wakate A/B).

Source: [http://www.rprc.hirosaki-u.ac.jp/~gakunai/suishin/kaken/setumeikai/h24/240723\\_03.pdf](http://www.rprc.hirosaki-u.ac.jp/~gakunai/suishin/kaken/setumeikai/h24/240723_03.pdf)

○ 第1段審査	
・審査委員数	5,500名
・審査期間	40日間
・1人当審査件数	平均約70件 (最高149件)

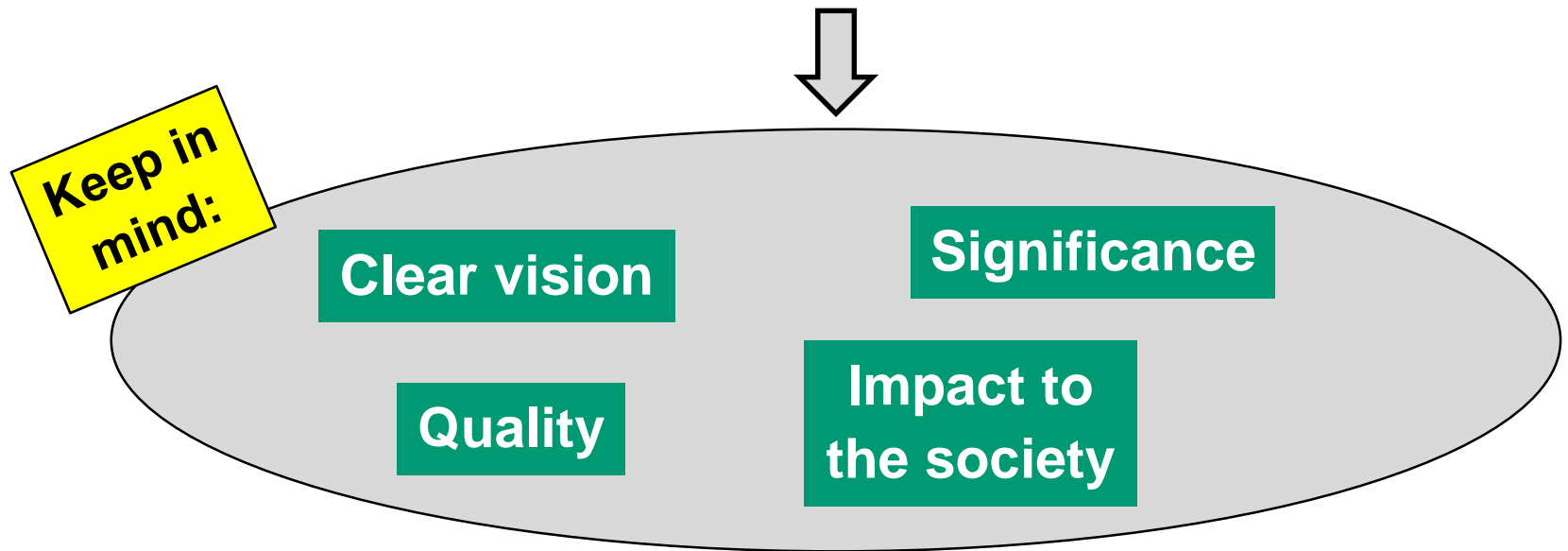


## Comments from reviewers (Ikuko Fujiwara, pers. comm. 2016)

- Clear and short statements help to understand points in a limited time.
- Describing differences with similar research help to compare assessments.
- First impression is important because I sort proposals into 3 categories (good, ok, poor) by brief reading, while I read repeatedly for more fine screening.

# Consider the evaluation criteria

- (1) Academic importance and validity of the research.
- (2) Validity of the research plan and methods.
- (3) Originality and innovativeness of the research.
- (4) Ripple effects and comprehensiveness.
- (5) Ability to conduct the research and appropriateness of the research environment.



# Preparation

## Set aside sufficient time to create a strong proposal

Start researching and writing your proposal well in advance of the first submission deadline

(especially for less-experienced writers).

## Develop an idea for the proposal

What is/are the main research question(s)?

Why is the topic worth being investigated?

Which work has been done in the past? How does your work build upon it?

→ **Comprehensive literature research.**

How much work can realistically be done within the project time?

(interesting, ambitions ↔ don't promise too much)



# Preparation

## Assemble a strong team

Principal investigator (probably you),  
co-investigators (*kenkyū-buntansha* [with own budget],  
*renkei-kenkyūsha* [without own budget]),  
further collaborators (e.g., from abroad),  
students...

## Think about the budget

How much money will be needed?

(Equipment, consumables, travel, personnel, publication costs...)

→ choice of KAKENHI category.

## Section

### “Research Objectives, Research Method, etc.”

This first section of the proposal is

**highly important**

in convincing potentially non-specialist reviewers that your proposed research is important and interesting, and that your research plan is logical and capable of succeeding.

Consider potential reviewer fatigue!

# Research Objectives/Method section

## Scientific Research (B) (General) 1

### 1. Research Objectives, Research Method, etc.

This research proposal will be reviewed in the Basic Section of the applicant's choice. In filling this application form, refer to the Application Procedures for Grants-in-Aid for Scientific Research -KAKENHI-.

In this column, research objectives, research method, etc. should be described within 3 pages. A succinct summary of the research proposal should be given at the beginning.

The main text should give descriptions, in concrete and clear terms, of (1) scientific background for the proposed research, and the "key scientific question" comprising the core of the research plan, (2) the purpose, scientific significance, and originality of the research project, and (3) what will be elucidated, and to what extent and how will it be pursued during the research period.

If the proposed research project involves Co-Investigator(s), a concrete description of the role-sharing between the Principal Investigator and the Co-Investigator(s) should be given.

# Research Objectives/Method section: Some general tips

- Carefully read the instructions for this section and **follow them**.
- For clarity and ease of organization, use the points listed in the instructions as **section headings**:
  - Summary** ← **Triple attention!!!**
  - Scientific background**
  - Purpose, significance and originality**
  - What will be elucidated**
- Easy to understand writing (no excessive jargon), logical, concise, attractive, with examples and diagrams...
- Include a Literature Cited (References) section (condensed!).

## Example: two differently developed sections

(“Purpose of the Research”,  
from an older version of the application form!)

**Example 1:** a marginally developed section.

**Example 2:** a better organized, more fully developed section fortified with illustrative examples and evidence in the form of citations.

**(Please see handout 1.)**

In terms of logic and basic content, these two versions are almost identical: highlighted text in Example 2 is also present in Example 1.

**Example 2 is from a successful proposal** (by Prof. Matthew Dick).

**Example 1 might not have been funded** because the section did not sufficiently gain the reviewers’ attention at the beginning.

# Section “Research Development Leading to Conception of the Present Research Proposal, etc.”

## Scientific Research (B) (General) 4

### **2. Research Development Leading to Conception of the Present Research Proposal, etc.**

In this column, descriptions should be given within 2 pages, of (1) applicant’s research history leading to the conception of this research proposal, (2) domestic and overseas trends related to the proposed research and the positioning of this research in the relevant field, (3) applicant’s hitherto research activities, and (4) preparation status and feasibility of the research plan.

If the applicant has taken leave of absence from research activity for some period (e.g. due to maternity and/or child-care), he/she may choose to write about it in “(3) applicant’s hitherto research activities”.

Again, use the points (1)–(4) listed in the instructions  
as section headings

&

add a condensed references section.

# Section “Research Achievements of the Principal Investigator (PI) and Co-Investigator(s) (Co-I(s))”

## Scientific Research (B) (General) 6

### **3. Research Achievements of the Principal Investigator (PI) and Co-Investigator(s) (Co-I(s))**

In this column, selected research outputs by the PI and Co-I(s) such as papers, books, patents, and invited talks, should be listed within 2 pages. The list items should be numbered in a chronological (either descending or ascending) order. Papers under submission can be included only if they are already accepted for publication.

For a research paper in an academic journal, the title, author(s), journal, refereed or not, volume, first and last pages, and publication year should be given. (As long as all items of information are given, their order is unimportant.) For a paper with a very long author list, it is permissible to show only the names of principal authors. In that case, write the number of coauthors, and indicate the order of the PI (or Co-I) in the author list (e.g. 3<sup>rd</sup> of 18 authors).

The name of PI in the author list should be doubly underscored, while Co-I(s) should be singly underscored.

Just a list → simple to do!

## Further sections

- Issues Relevant to Human Right Protection and Legal Compliance
- Items to be Entered When New Application is Made in the Fiscal Year Previous to the Final Year of the Research Period of an On-Going KAKENHI Project

**Carefully read the instructions  
and follow them!**



# Budget (to be entered online)

**Get additional score from good budget planning.**

## Categories:

Equipment, consumables, travel expenses, personnel costs, miscellaneous (e.g., publication costs).

- Be specific: E.g., not just “international conference”, rather “AGU Fall Meeting, San Francisco, USA (1 person x 7 days)”.
- Be economical: Don’t ask for unreasonably much stuff.
- Provide good reasons.

**A good shopping list can convince reviewers  
of a viable project!**

# Practical tips

## Font type and size

For proposals written in English, use Times New Roman font.

Very commonly used print font, good readability.

Bold and italics show better with this font.

11-point size is the smallest you should use  
(except References, which can be 9 point).

## Avoid leaving large blank spaces

Blank space gives reviewers the impression that you have either over-simplified, or do not have much to say.

Therefore, try to largely use up the available space.

On the other hand: Stick to the space provided in the application form. Do not insert extra pages!

# Practical tips

## Work on the formatting

Try to give your proposal a pleasant, harmonic overall appearance. This will make the reviewers much more inclined to judge your proposal favourably.

## Writing style

Easy to understand writing.

Include examples.

No excessive jargon.

Logical, concise, attractive.

# Practical tips

## Include figures and tables

Helpful for “loosening up” the proposal, more pleasant for the reviewers than just text.



**Reviewers get only B/W copies of the proposal!**

## Carefully check for grammatical and spelling errors

Demonstrates that you have taken the proposal writing seriously, makes a good impression on the reviewers.

# Practical tips

## Other peoples' input

- Before/during writing:

  - If you need advice, ask an experienced colleague.

    - Getting a template (old proposal) also helps.

- Speed check: Ask a friend/colleague to have a look at your proposal for 3 min → first impression.

- Have your proposal reviewed by a colleague in the same or neighbouring field (e.g., a co-investigator).

- Have your proposal checked by your department administration (mainly for formal issues).

GOOD

😊 LUCK!

