

11 September 2020



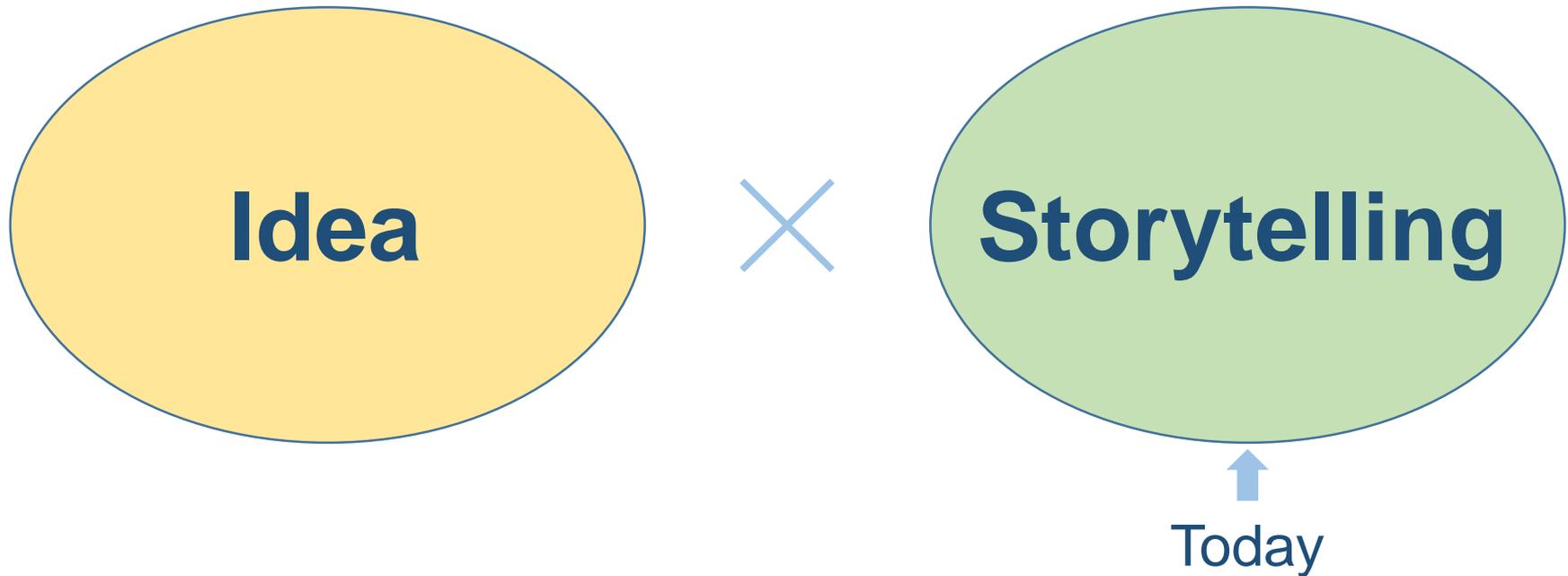
Part 1

KAKENHI overview & evaluation system

Makoto Shida, URA, WPI-ASHBi

Grant application is about **Convincing your research plan!**

2 Important factors of proposal



Contents

1. KAKENHI Overview & Evaluation System

How and by whom is your proposal evaluated?

2. KAKENHI Proposal Format

What and where should you write in the format?

3. Preparing an effective KAKENHI Proposal

What can you do to tell your story more effectively?

1. KAKENHI Overview & Evaluation System

How and by whom is your proposal evaluated?

2. KAKENHI Proposal Format

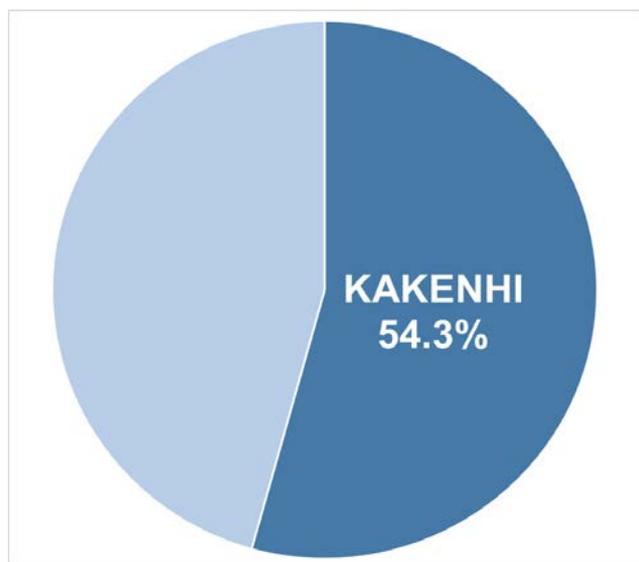
What and where should you write in the format?

3. Preparing an effective KAKENHI Proposal

What can you do to tell your story more effectively?

1-1 KAKENHI is the **main funding source** in Japan, and **you work your way up** as you proceed.

Government Competitive Funds



FY2019 JPY 436B

White Paper on Science and Technology 2019, MEXT

KAKENHI Categories

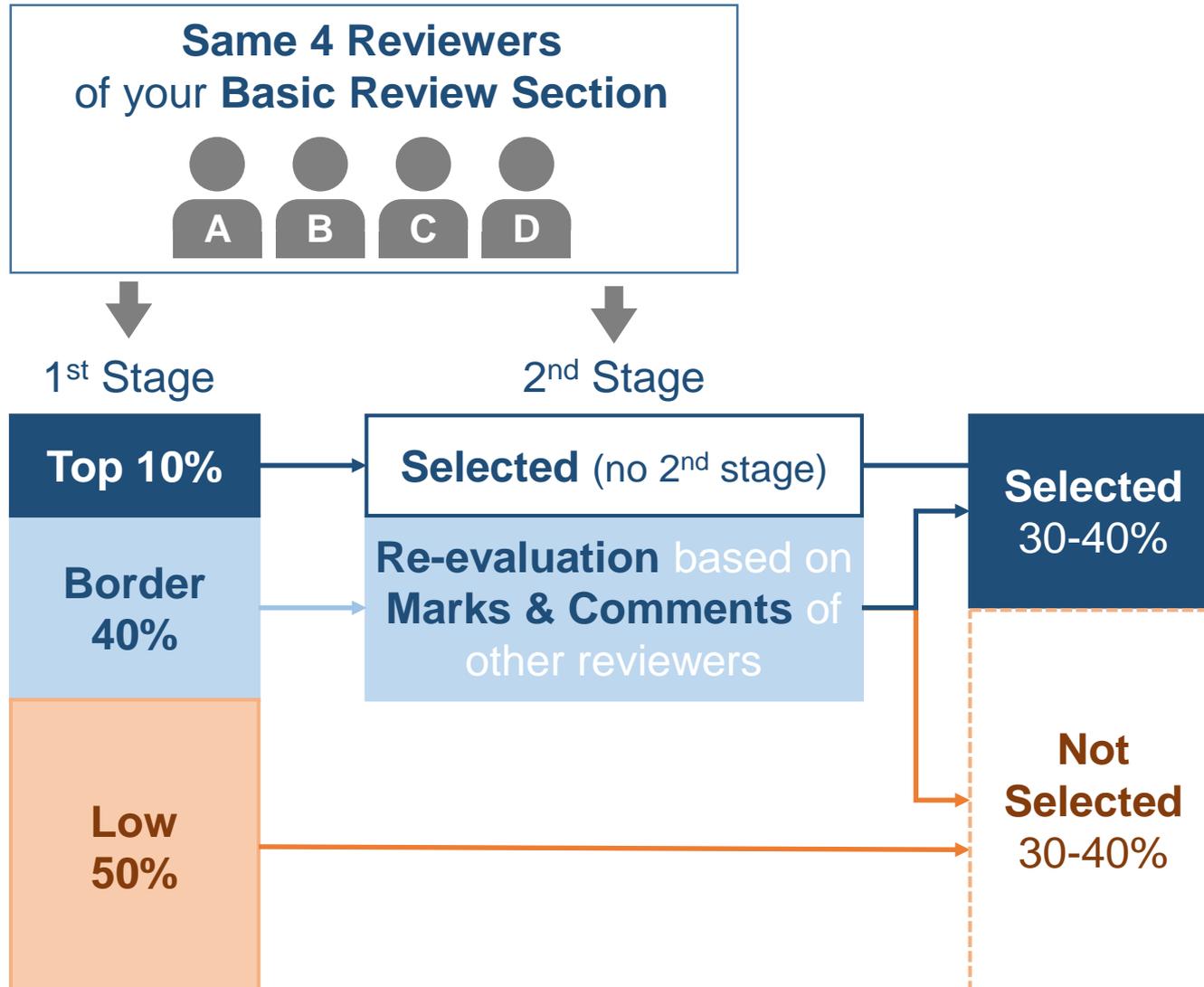
Category	Duration	Grant Size
Kiban S	5Y	JPY 50 – 200M
Kiban A	3 – 5Y	JPY 20 – 50M
Kiban B	3 – 5Y	JPY 5 – 20M
Kiban C	3 – 5Y	≤ JPY 5M
Early Career (Wakate)	2 – 5Y	≤ JPY 5M

+ other special categories

1-2 **Wakate** is the **ideal starting fund** for the Early-Stage Researchers if you are eligible.

Category	Wakate (Early Career)	Kiban C (Scientific Research C)
Eligibility	< 8 years after PhD acquisition	None
Project duration	2 – 5 Y	3 – 5 Y
Grant size (total amount)	≤ JPY 5M	≤ JPY 5M
Success rate (FY2019)	FY 2019 40.0% FY2018 30.7%	FY2019 28.2% FY2018 27.9%
Allocation Rate (% of proposed amount)	64.9%	66.9%

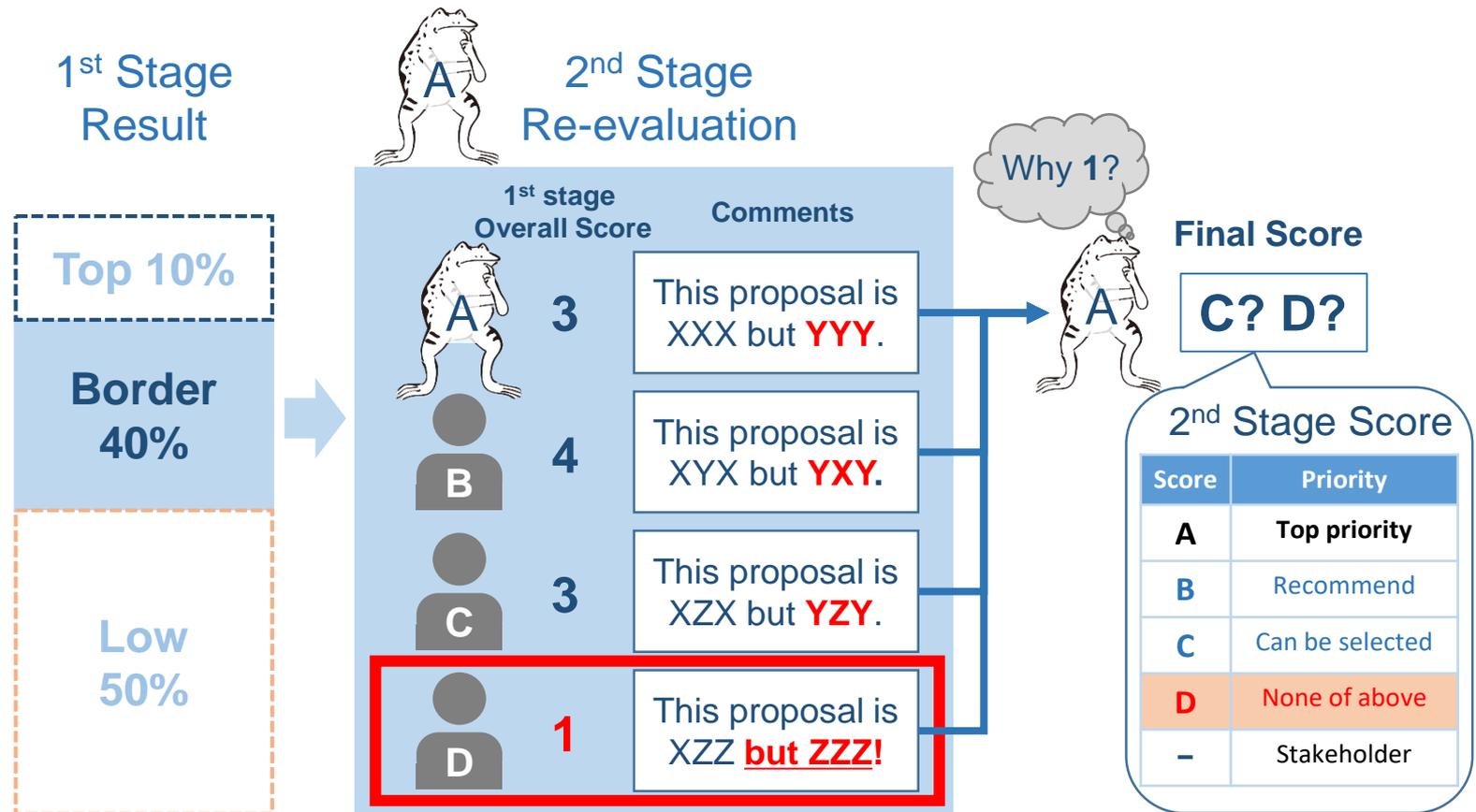
1-3 For Wakate & Kiban C, **Four reviewers** will evaluate your proposal in **Two stages**



1-4 2nd stage is **Elimination**. Even one reviewer's **bad score may be critical**.

Reviewers will check the reasons for the low mark by others.

Make sure **all necessary conditions are fulfilled** in your proposal so that they won't mark your low for small things.



1-6 Select your research field according to “Who will understand my research best?”

Example: “Comparison of skeletal formation of mammalian embryos”

Basic Section	Examples of related research content
44020 Developmental Biology-related	Cell differentiation, Stem cells, Regeneration, Germ layer formation, Morphogenesis, Organogenesis, Fertilization, Germ cells, Regulation of gene expression, Developmental genetics, Evolution and development, etc.
56020 Orthopedics-related	Orthopedics, Rehabilitation medicine, Sports medicine, etc.

Ask your Japanese colleague to help you check the **past reviewer list** of the section you are aiming for.

https://www.jsps.go.jp/j-grantsinaid/14_kouho/meibo.html

Your reviewer may consist of an expert of
“**similar**” but “**not exactly**” the same field as you...

So, write in “**easy-to-understand**” language

1-6 Reviewers **don't** have much time in evaluation, make your documents **easy-to-understand** format



50+ proposals × 7p=
over 350p!!



Which document is easier to understand in a glance?

A

B

“Guidelines for Writing KAKENHI Proposals, 3rd edition”, KURA

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What can you do to tell your story more effectively to the evaluators?

2-1 KAKENHI Proposal consists of 4 parts

Part 1
Executive Summary,
Objectives, Method, etc.

Part 2
Research history, research
field trends, etc.

Part 3
Past achievements/honors,
research environment, team,
etc.

Part 4
Human Right Protection,
Legal Compliance etc.

Form 5-21: Research Proposal Document (form to be updated) Early-Career Scientist 3

1. Research Objective, 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.

[SUMMARY]

[MAIN TEXT]

*Note:
1. Read carefully the "Procedures for Preparing and Entering a Research Proposal Document" when preparing the document.
2. The document should be written with four size 10 pages or larger.
3. The title and instructions on the upper part of each page should be left margin.
4. Do not exceed the maximum number of pages specified in the instructions. In case blank page(s) occur, leave them as they are (do not eliminate any page).
5. These notes written in italics should be deleted when filling this column.

3 pages

Early-Career Scientist 4

2. Research Development Leading to Conception of the Present Research Proposal, etc.
In this column, descriptions should be given within 1 page, of (1) applicant's research history leading to the conception of this research proposal and its preparation status, and (2) domestic and overseas trends related to the proposed research and the positioning of this research in the relevant field.

1 page

Early-Career Scientist 5

3. Applicant's Ability to Conduct the Research and the Research Environment
In this column, descriptions of (1) applicant's heretofore research activities, and (2) research environments including research facilities and equipment, research materials, etc. relevant to the conduct of the proposed research should be given within 2 pages to show the feasibility of the research plan by the applicant (Principal Investigator).
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 "(1) applicant's heretofore research activities".

*Note:
1. The description in this column is to explain the feasibility of the research plan. On citing research achievements (research papers, books, patents, invited talks, etc.) they should be given not as an exhaustive list but as supporting evidence to prove the applicant's ability to conduct the proposed research.
2. Sufficient information should be given so that the reviewers can identify the research achievements.
In the case of a research paper, for example, the relevant bibliographic information, including the title of the paper, the author(s), the title and the volume of the journal, the publication year, and the pages of the article should be given.
3. The research papers that can be cited are only those already published or accepted for publication.
4. These notes written in italics should be deleted when filling this column.

2 pages

Early-Career Scientist 7

4. Issues Relevant to Human Right Protection and Legal Compliance
(Of Application Procedures for Grants-in-Aid for Scientific Research)
In case the proposed research activities such as those that require obtaining consent and/or cooperation of the third party, consideration in handling of personal information, or actions related to biobanks and/or biobiosily (including the laws and regulations and the guidelines in the country/japan) where the joint international research is to be conducted, the planned measures and actions for these issues should be stated within 1 page.
This applies to research activities that would require approval by an internal or external ethical jury, such as research involving questionnaire surveys, interviews and/or behavior surveys (including personal histories and images) including personal information, handling of donated specimens, human genome analysis, recombinant DNA, and experimentation with animals.
If the proposed research does not fall under such categories, enter "N/A (not applicable)".

1 pages

Total 7 pages

2-5 Proposal structure can be broken down to **Main Body** and **Supporting Evidences**

Part 1 Research Proposal

Part 2 Background

Part 3 Feasibility

Part 4 Compliance

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Early-Career Scientist 4

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Early-Career Scientist 5

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2 pages

Early-Career Scientist 7

4. Issues Relevant to Human Right Protection and Legal Compliance
(Of Application Procedures for Grants-in-Aid for Scientific Research)
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If the proposed research does not fall under such categories, enter "N/A (not applicable)".

1 pages

Main body Supporting Evidences

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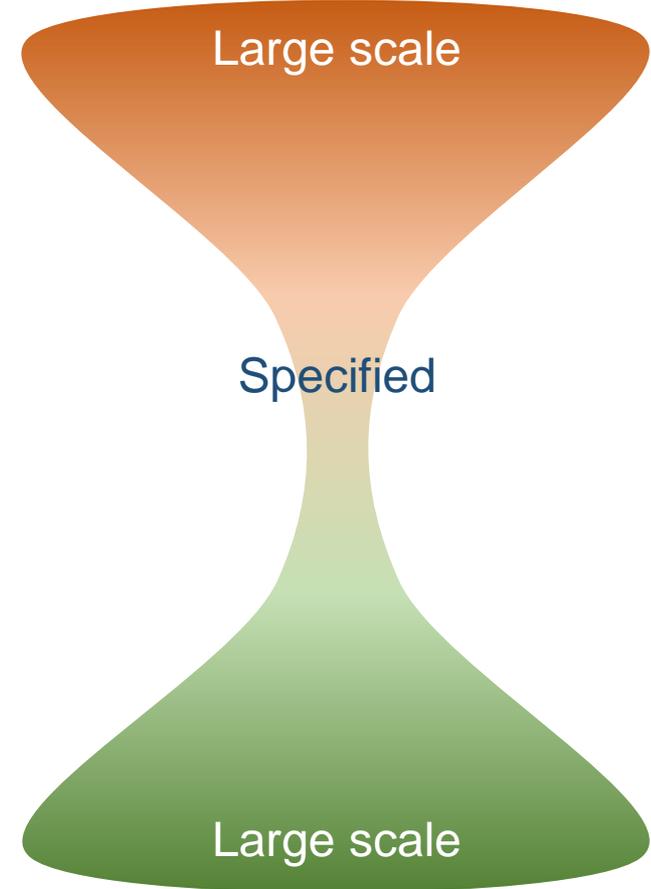
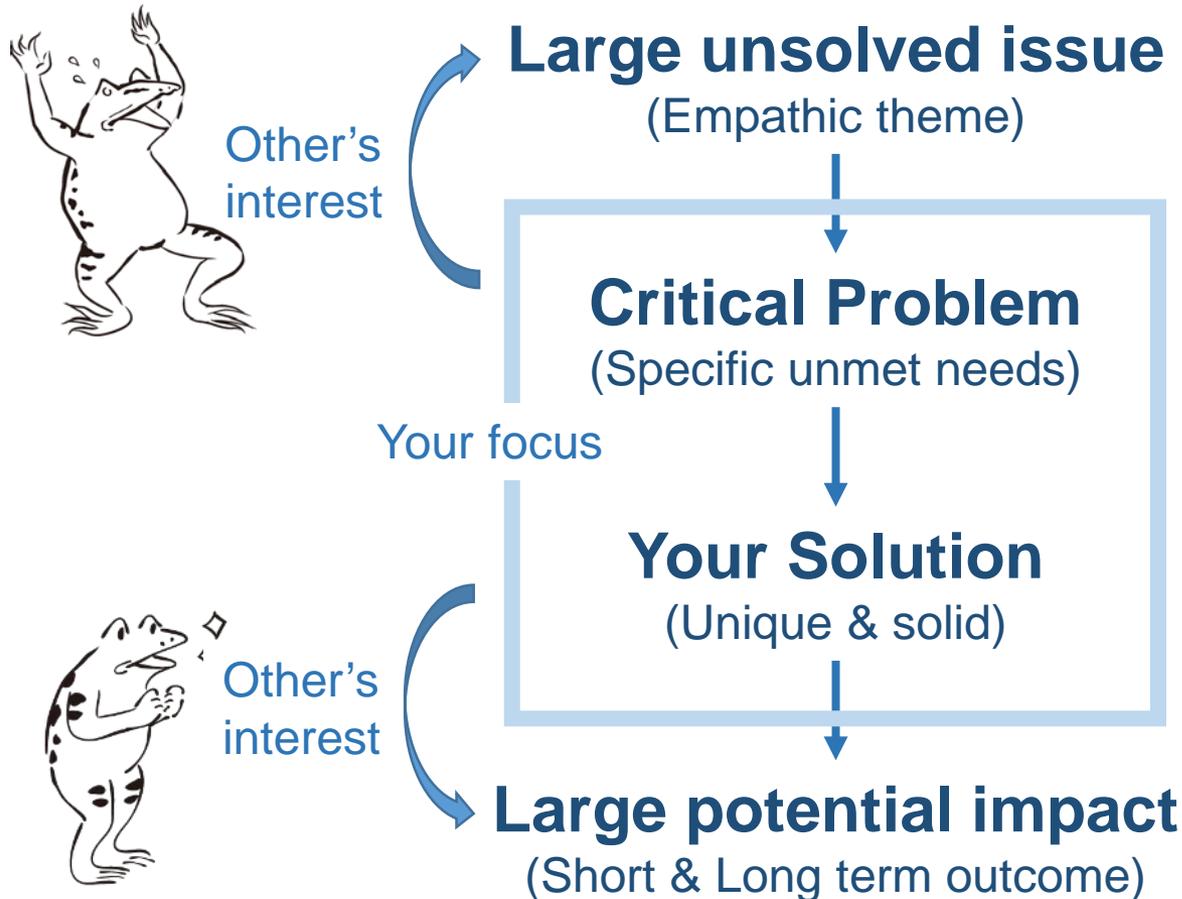
3-1 Grant Writing is to convince your future plan not to explain your past findings

Academic Writing versus Grant Writing: Contrasting Perspectives

Academic Writing	Grant Writing
Scholarly pursuit: <i>Individual passion</i>	Sponsor goals: <i>Service attitude</i>
Past oriented: <i>Work that has been done</i> Theme-centered: <i>Theory and thesis</i> Expository rhetoric: <i>Explaining to reader</i> Impersonal tone: <i>Objective, dispassionate</i>	Future oriented: <i>Work that should be done</i> Project-centered: <i>Objectives and activities</i> Persuasive rhetoric: <i>“Selling” the reader</i> Personal tone: <i>Conveys excitement</i>
Individualistic: <i>Primarily a solo activity</i> Few length constraints: <i>Verbosity rewarded</i> Specialized terminology: <i>“Insider jargon”</i>	Team-focused: <i>Feedback needed</i> Strict length constraints: <i>Brevity rewarded</i> Accessible language: <i>Easily understood</i>

Source : Porter R, “Why Academics Have a Hard Time Writing Good Grant Proposals”,
The Journal of Research Administration, vol 38, 2, 2007

3-2 Strategically plan your storyline using a a “**Large-Specified-Large**” (hourglass like) scope



3-3 Create a “**Key Scientific Question**” in which your proposal **provides the exclusive solution**

Large
Issue



You must distinguish yourself from others by showing that the **other ways will not reach** the solution you have proposed

**Your way
(the only way)**



Other ways

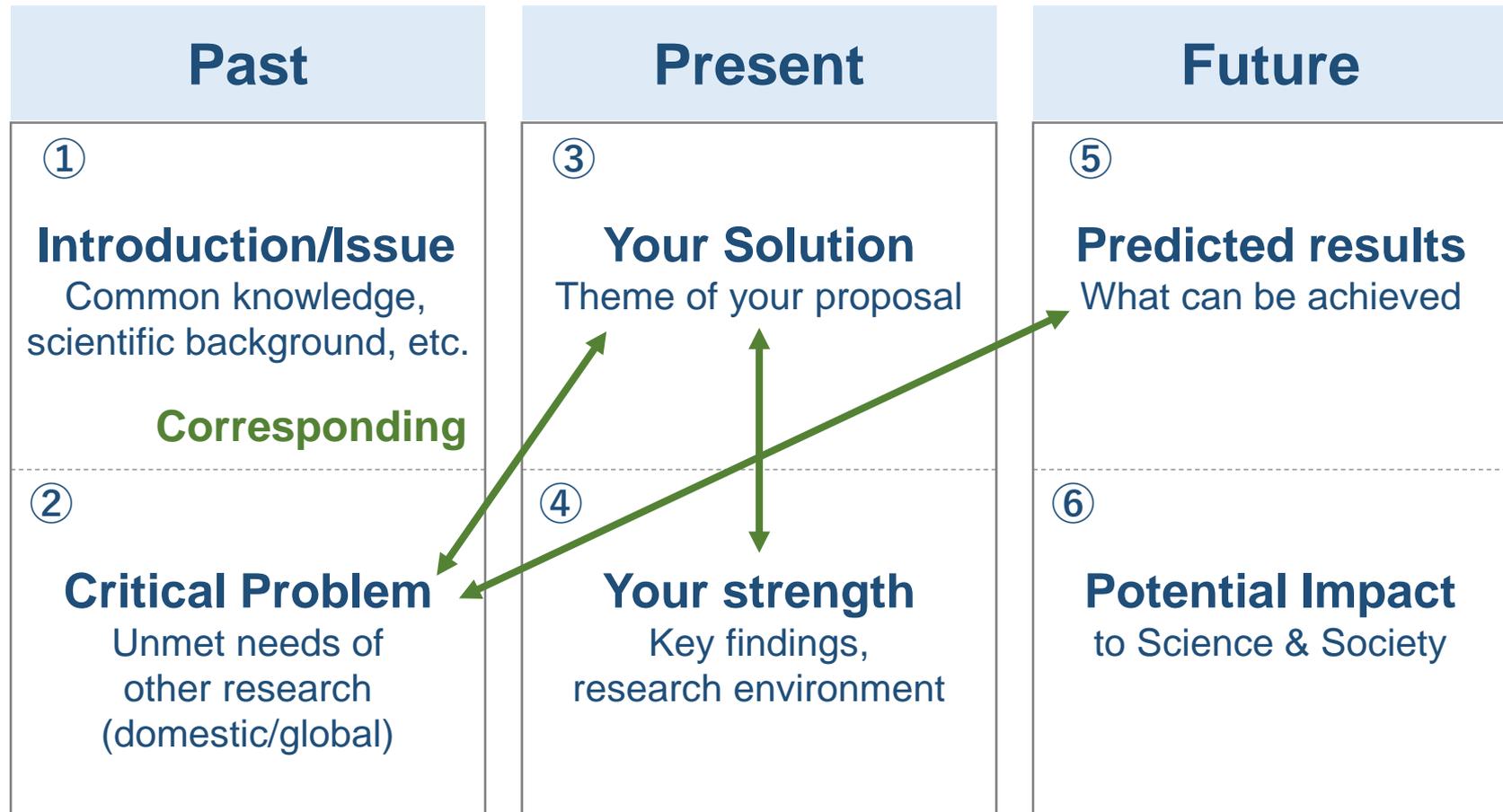


Large
impact



3-4 Identify your story components by making an **outline** before you start writing

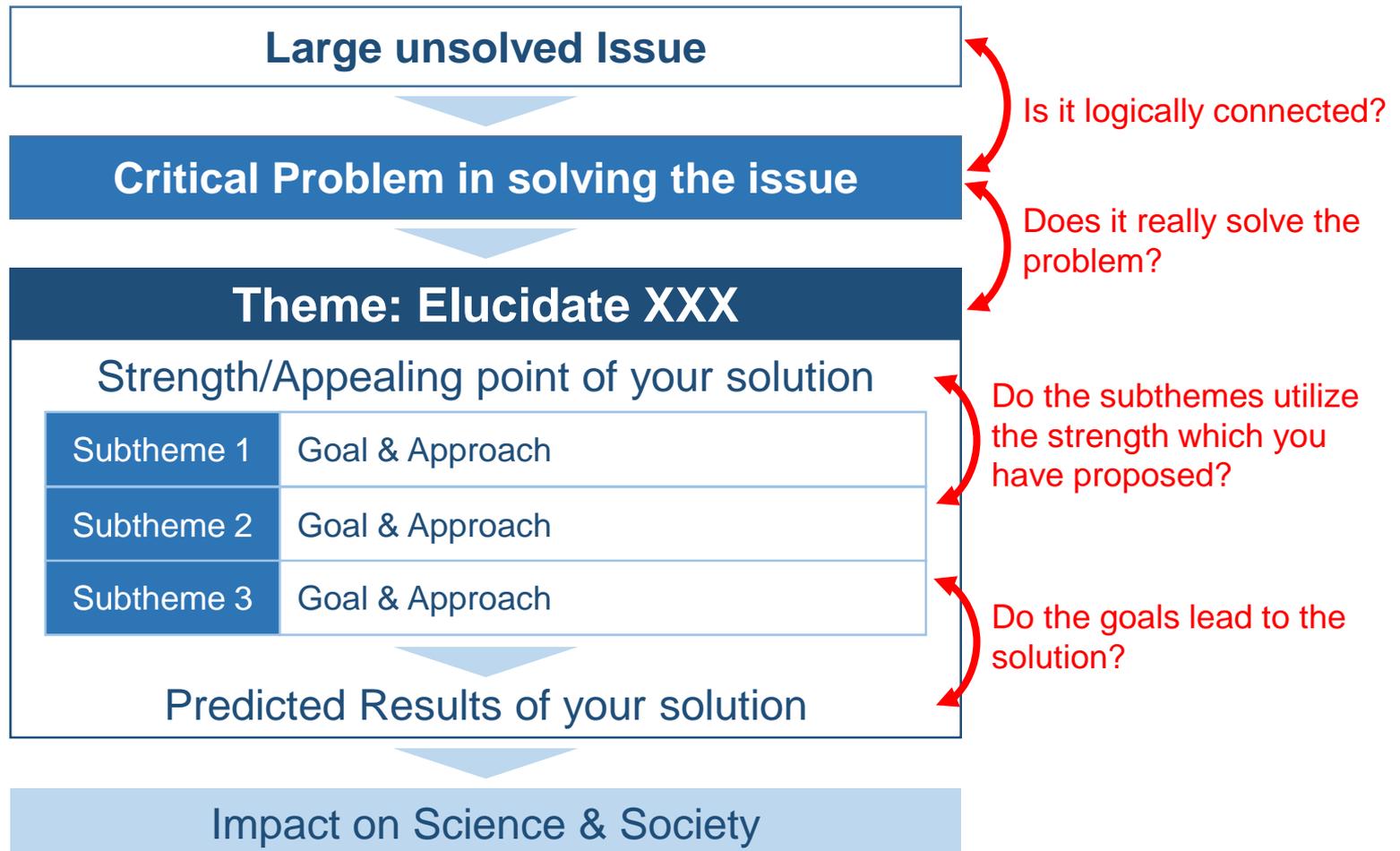
Outline Framework which you can use in creating your storyline



Modified from Ono E, “科研費研究計画調書のグラフィックデザイン”
ASHBi KAKENHI Seminar, 2019

3-5 Visualize the **logic & flow of your story** by making a **flow diagram** of your plan

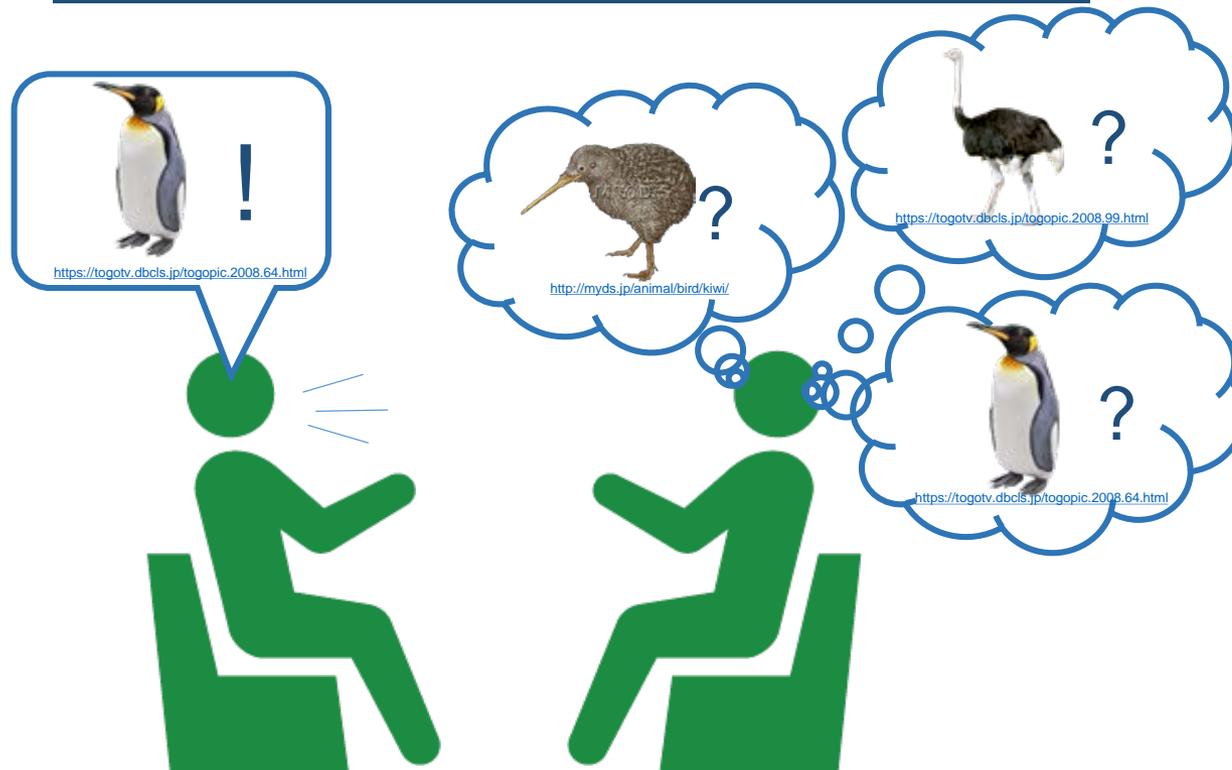
Visualize your storyline to check the flow



3-6 Try to obtain **Feedbacks** from others early so that major revision can be made if necessary

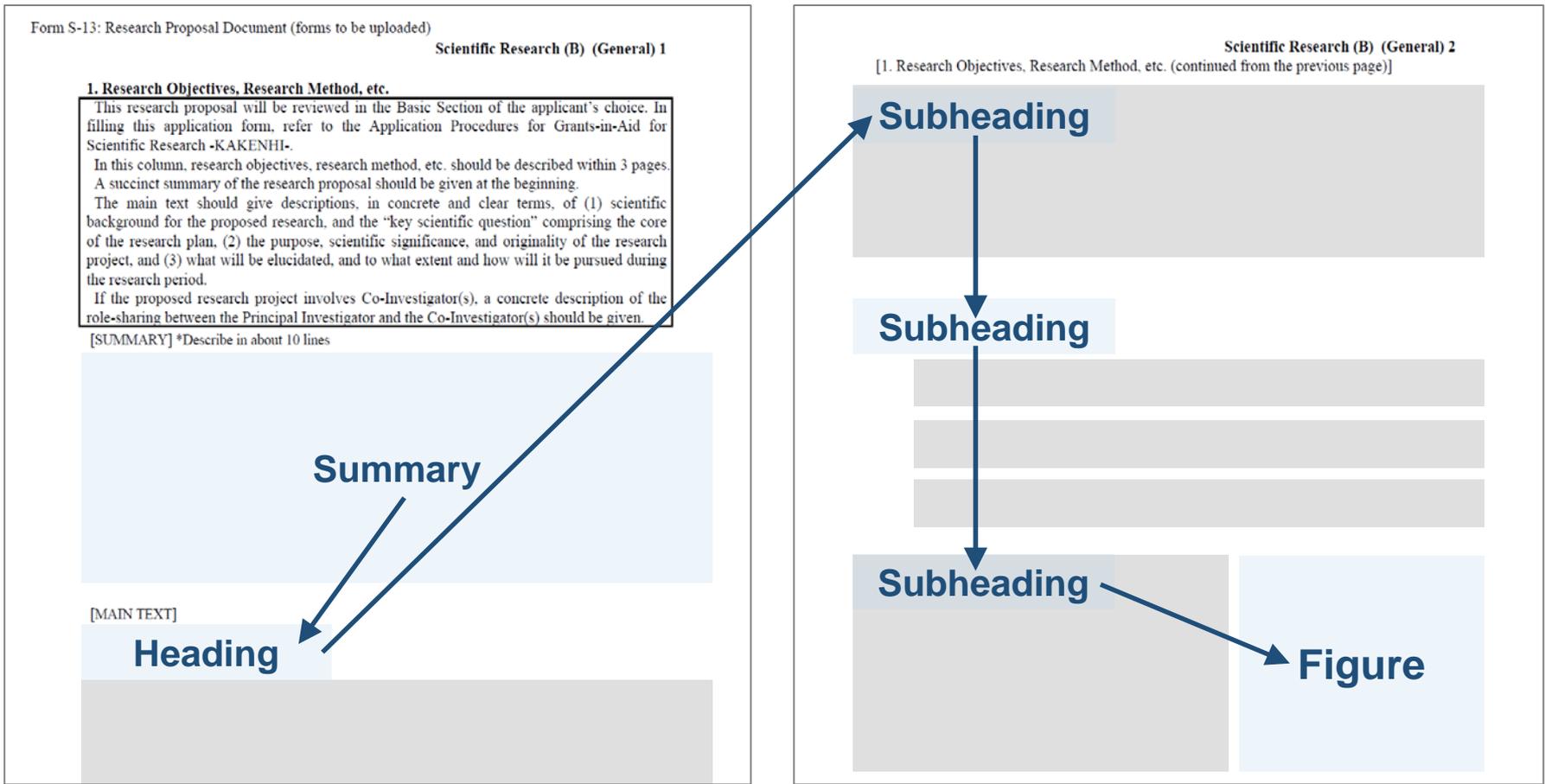
People from different backgrounds may not share the same understanding as you do

“A bird that doesn't fly”



3-7 Visualize your **story structure** by utilizing the **headlines & figures** as a guide to reviewers

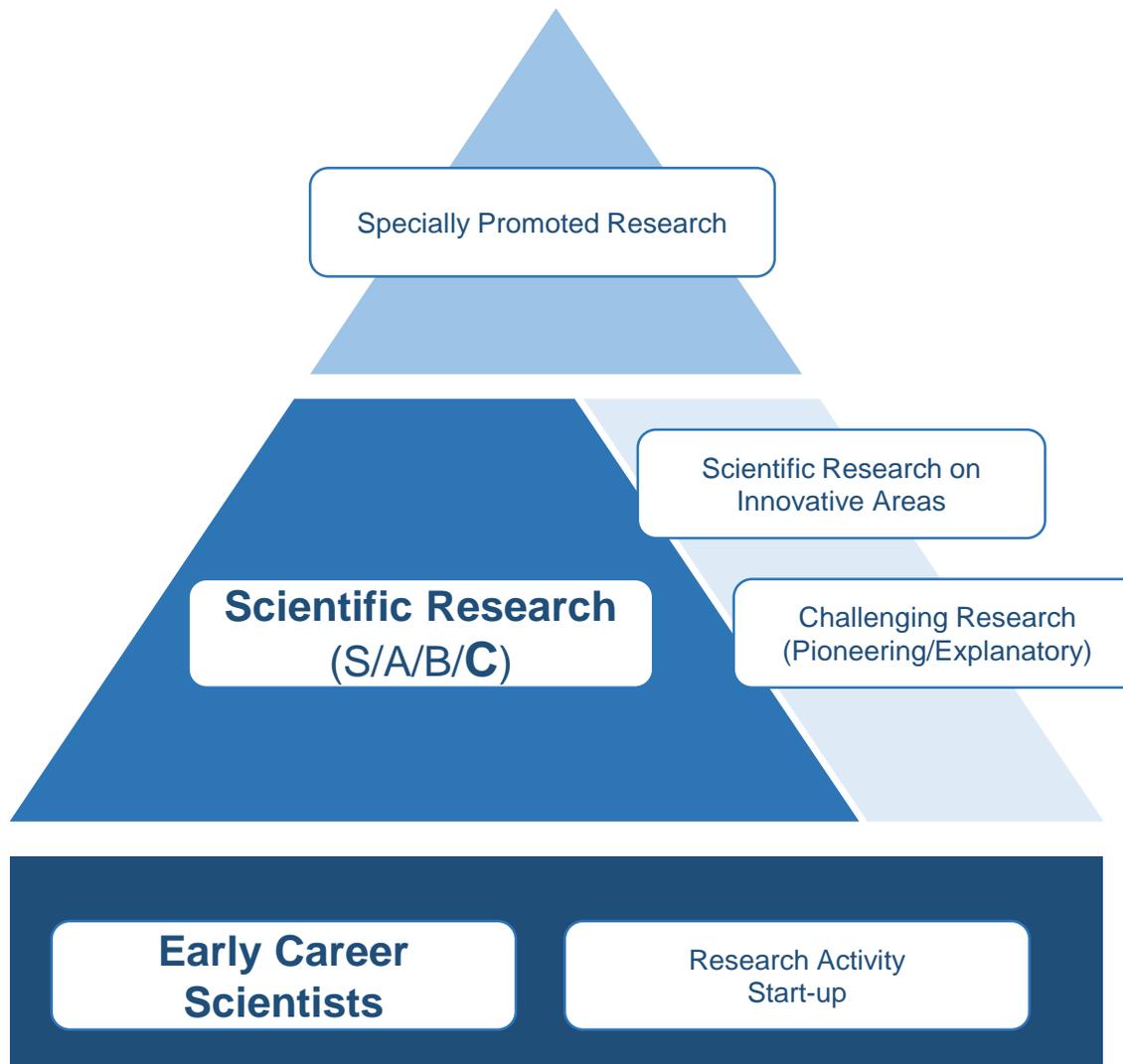
Example of a document structure to aid the readers' understanding at a first glance



Source : Ogawa T, "My experience as a reviewer"
KURA KAKENHI Preparation in Advance!, 2018

Appendices

App 1. KAKENHI Research Categories can be divided into 4 main groups



Source: KAKENHI Grants-in Aid for Scientific Research Pamphlet, JSPS
https://www.jsps.go.jp/english/e-grants/data/kakenhi_pamph_e.pdf

App 2. Useful links on KAKENHI

- KAKENHI proposal documents
<https://www.jsps.go.jp/english/e-grants/grants09.html>
- KAKENHI Review Section Table
https://www.jsps.go.jp/english/e-grants/data/r03/review_section_table.pdf
- KAKENHI past reviewer list (in Japanese)
https://www.jsps.go.jp/j-grantsinaid/14_kouho/meibo.html
- KAKENHI Peer Review Process
<https://www.jsps.go.jp/english/e-grants/grants03.html>
- KAKENHI Review Process & Assessment Criteria
https://www.jsps.go.jp/english/e-grants/data/2020/r2hyoutei03_en_general.pdf

App 3-1. Part 1 is your **Research Proposal** “**Key Scientific Question**” is very important

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-.

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

Research Proposal

App 3-2. Part 2 is your **Research Background** Part 3 is your **Feasibility**

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

In this column, descriptions should be given within 1 page, of (1) **applicant's research history leading to the conception** of this research proposal and its **preparation status**, and (2) **domestic and overseas trends** related to the proposed research and the **positioning** of this research in the relevant field.

Research Background

3. Applicant's Ability to Conduct the Research and the Research Environment

In this column, descriptions of (1) **applicant's hitherto research activities**, and (2) **research environments including research facilities and equipment, research materials, etc** relevant to the conduct of the proposed research should be given within 2 pages to **show the feasibility of the research plan by the applicant (PI) (and Co-I(s) if any).**

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 “(1) applicant's hitherto research activities”.

Feasibility

App 3-3. Part 4 is the **Compliance**

4. Issues Relevant to Human Right Protection and Legal Compliance (*cf.* Application Procedures for Grants-in-Aid for Scientific Research)

In case the proposed research involves such issues that require **obtaining consent and/or cooperation of the third party, consideration in handling of personal information, or actions related to bioethics and/or biosafety** (including the laws and regulations and the guidelines in the country/region(s) where the joint international research is to be conducted), **the planned measures and actions for these issues** should be stated within 1 page.

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If the proposed research does not fall under such categories, enter “N/A (not applicable)”.



Compliance