



KAKENHI

(Grants-in-Aid for Scientific Research)

Explanation Material

1. A brief outline of the KAKENHI research grants, latest changes and application procedure

Dr. Pitambar GAUTAM

Creative Research Institution

2. How to write a science research grant proposal: Tips to write successful application documents-and avoid pitfalls

Dr. Oliver WRIGHT

Professor, Graduate School of Engineering

3. How to write strong KAKENHI proposals

Dr. Ralf GREVE

Professor, Institute of Low Temperature Science

Main Sources:

JSPS/MEXT KAKENHI Pages

September 25, 2020

1. A Brief Outline of the KAKENHI Research Grants, Latest changes and Application Procedure

Dr. Pitambar GAUTAM
Creative Research Institution

Grants-in-Aids for Scientific Research: How to Apply

<https://www.jsps.go.jp/english/e-grants/howtoapply.html>

Grant Application Guidelines and Application Forms page:

<https://www.jsps.go.jp/english/e-grants/grants09.html>

Application Procedures for Grants-in-Aid for Scientific Research FY2021

https://www.jsps.go.jp/english/e-grants/data/r03/r3koubo_e.pdf

Supplement (Forms / Procedures for Preparing and Entering a Research Proposal Document)

https://www.jsps.go.jp/english/e-grants/data/r03/r3koubo_bessatsu_e.pdf

FY2021 Procedures for Preparing and Entering a Research proposal Document (items to be entered in the Website: For Scientific Research S (above), and A/B/C; Challenging Res (Pion. & Explor.), and Early-Career Scientists (below))

https://www.jsps.go.jp/english/e-grants/data/r03/web_yoryo_kiban_s_e.pdf

https://www.jsps.go.jp/english/e-grants/data/r03/web_yoryo_e.pdf

THE JSPS Electronic Application System <https://www-shinsei.jsps.go.jp/kaken/english/index.html>

Information on Types of Grant Programs (Specially Promoted (Innovative); Scientific: S, A, B, C; Challenging Research (Pioneering & Exploratory); Early-Career Scientists; Start-up; Encouragement)

<http://www.jsps.go.jp/english/e-grants/grants01.html>

Handbook on the Grants-in-Aid for Scientific Research. (FY2019 Edition)

<http://www.jsps.go.jp/english/e-grants/data/handbook.pdf>

Kakenhi@Hokudai Page of the Office for Enhancement of Institutional Capacity (OEIC)

<https://u4u.oaic.hokudai.ac.jp/en/kakenhi-hokudai/>

Kakenhi Support Page (Japanese and English) <http://www.hokudai.ac.jp/jimuk/gakunai/gaibu>

Table of Restriction: https://www.jsps.go.jp/english/e-grants/data/r03/table_of_restriction.pdf

9/1 Application requirements announced (JSPS, Notification at HU)

9/25 Upload of Explanation Materials (in English) to Web Page

Sept-Oct Announcement of rules, programs by JSPS & MEXT through HP

1st half of Oct “FY2021 KAKENHI review & evaluation rules & regulations” by JSPS
(Information on KAKENHI “Research in New Areas” to be posted at MEXT page)

10/1 to 10/20

10/8 to 10/27

Administrative Check service of KAKENHI proposals
(recommended !)

HU’s Internal Deadline for Submission of Applications

10/27 Tuesday (17:00): “Publication of Research Result” category

11/2 Monday (16:00): All other categories

As each department/institute/center has **internal deadline**, check with the KAKENHI-in-charge there.

How and what to submit by the above deadline

(1). Use the 【*Kakenhi Denshi Shinsei Systemu (= Electronic Application System)*】 and, submit online your 「Kenkyu Keikakutyousho」 = Research

(2). Submit the printed copy of 「**Oubojyouhou (Application Information: Web input items)**」.

----- HU forwards the application forms to MEXT/JSPS-----

11/5 Thursday (16:30) Deadline for submission of all documents by HU to MEXT/JSPS

What is checked?

1. Does the application form follow the guideline?
2. Is it complete?
3. Is it correct (regarding format)?

When?

The proposal (prior to submission) is accepted via Departments/institutes during:
(1) **1-20 Oct** for Grants in New (Innovative) Areas (koubo kenkyu), Scientific Research (B), (C), Challenging Research (Pioneering & Exploratory) Early-Career Scientists, and Publication of Research Results; and
(2) **8-27 Oct** for Grants in Specially-Prom Res, and Scientific Research (S), (A).

To use this service, submit **your complete application including the web input** to Research Promotion Office via KAKENHI In-charge of your Departmental Office.

You may refer to the file: Adm Serv Checklist Format.xps

(1) Changes in the “Early-Career Scientists” Category

- The project period for the Early-Career Scientists category has been changed from “2 to 4 years” to “2 to 5 years, so that applicants can opt for longer-term research plans.”
- The transitional measure enabling non-Ph.D. researchers 39 years of age or younger to apply for the Grant-in-Aid for Early-Career Scientists was terminated after the FY2020 Call for Proposals.
- To promote the natural step-up flow from the Early-Career Scientists Research category to the Grant-in-Aid for Scientific Research category, a researcher who already received a grant in the Grant-in-Aid for Scientific Research category is ranked ineligible for application to the Early-Career Scientists category.

(2) Amendment of the “Scientific Research (B)” Category

- The transitional measures for preferential adoption of research proposals submitted by young researchers in the Grant-in-Aid for Scientific Research (B) was terminated after the FY2020 Call for Proposals.

(3) Improvement of the Competitive Research Fund system on the basis of “the comprehensive package to strengthen research capacity and support young researchers”

- Starting from the FY2021 Call for Proposals, the cost of “buyout”, i.e. someone taking over a part of the duties (other than research) of the Principal Investigator or Co-Investigator(s), can be covered by the direct expense of KAKENHI.
 - Having started in April 2020, young researchers employed with a KAKENHI grant are allowed to conduct their own research, under certain conditions, even within the assigned working hours of the KAKENHI project.
- (4) Call for Proposals for “Transformative Research Areas (A/B) Category
- MEXT plans to announce the FY2021 Call for Proposals for the “**Grant-in-Aid for Transformative Research Areas (A/B)**” category (est. in FY2020) in November 2020. The timing may change depending on the circumstances of COVID-19. Also, MEXT will announce The Call for Proposals for the “Publicly Offered Research” of the on-going research areas in the “**Scientific Research on Innovative Areas (Research in a Proposed Research Area)**” category (adopted in FY2018) is scheduled in September 2020 by MEXT.
- (5) Request for Participation in the KAKENHI Peer-review Process
- Re-emphasis that a researcher has responsibility to accept invitation to serve as KAKENHI reviewer. Supporting the KAKENHI peer-review system by all by sharing of the burden of proposal review is crucial in sustaining the scientific research.

On the Use of researchmap by KAKENHI Proposal Reviewers ⁸

Utilization of “researchmap” and KAKEN databases

<Concrete recommendation on the use of “Researchmap”>

- The applicant’s **ability to conduct research is judged from the Research Proposal** through the Grants-in-Aid Review.
- While screening the proposals, reviewers may consult *researchmap* if it is deemed necessary. As, **access to *researchmap*** (<https://researchmap.jp/search/?lang=English>) **by reviewers will become easier than before**, you are advised to enter all important information (e.g., publications, etc.) into the database/system and keep it up-to-date. Make sure to register the “Researcher Number”.

Therefore, applicants should ensure that the publications etc. that they want to be seen by reviewers are set in “disclose” mode.

- In general, *researchmap* contains also information that may have no relevance to the Grants-in-aid proposal review. Therefore, the reviewers are asked not to consult or use the information irrelevant to the proposal review process.

KAKENHI Rules and Misconduct Prevention Training

You are required to strictly adhere to KAKENHI rules

- Breaking the KAKENHI rules may result in deprivation from **awards for several years (1-5 yrs; 10 years when the funds were used for private purpose)** depending on degree of misuse of the funds. PI may be penalized for co-investigators' misconduct.
- Research misconduct (fabrication, falsification, plagiarism, etc.) may result in grant-application eligibility restriction for 1-10 years, depending on the degree of negative impact on society, research development, and the degree of maliciousness,

“Research Misconduct Prevention Training” Content and Attendance Method

- To be eligible for application and execution of KAKENHI project, applicants (including co-investigators) from HU must have completed the designated course related to the use of the research funds.
 - Co-investigator(s) from organizations other than HU should be asked to complete the training offered by concerned institution by the time of submitting application after the selection for grant, if any.
- * Submitted proposals will be checked if there are similar proposals by different PIs from the same research entity, as use of grants in this way is regarded as a misconduct.**

Practical Tips for writing KAKENHI Proposals

In order to assist you in writing proposals, two pdf files comprising the forms (respectively for Early-Career Scientist and Scientific Research C categories) with the writing tips are available.

1. Early-Career Scientists
form_writing tips.pdf
2. Scientific Research C
form_writing tips.pdf

Items to be entered in the Website

1ページ目、2ページ目の各項目名については、外国人の方にその内容が分かるよう、便宜的に英語も併記していますが、審査に付す際には、日本語のみの表示となります。
The item names written in English in the first two pages of this form (to be entered in the Website) are provided for the convenience of non-Japanese applicants. Only the Japanese item names will be shown when this form is sent to reviewers.

令和3年度(2021年度) 基盤研究(C) (一般) 研究計画調書
RESEARCH PROPOSAL DOCUMENT
GRANT-IN-AID FOR SCIENTIFIC RESEARCH (C) (General) (FY2021)

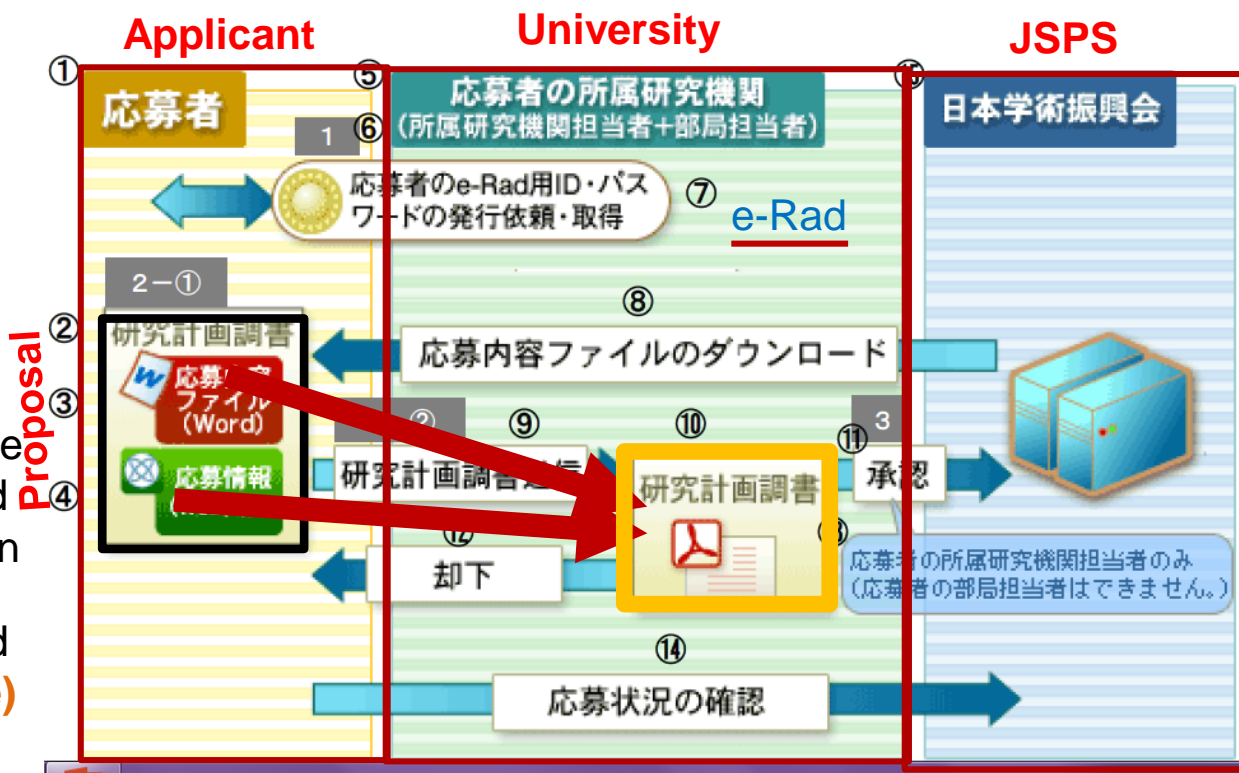
令和XX 年XX月XX日
September 1st, 2020
1版
1st edition

新規
New Proposal

研究種目 Research Category	基盤研究(C) Scientific Research (C)	応募区分 Application Section	一般 General
小区分 Review Section (Basic Section)	〇〇〇関連		
研究代表者氏名 Principal Investigator (PI)	(フリガナ) ダイヒョウ タロウ (漢字等) Name (in Roman letters)	DAIHYO TARO	
所属研究機関 Research Institution	北海道大学		
部局 Academic Unit (School, Faculty, etc.)	〇〇〇研究院		
職 Position	助教		
研究課題名 Title of Proposed Research Project	<div style="border: 1px solid red; padding: 5px;"> <p>Research title should clearly reflect the content of research (purpose, method and goal), what you want to achieve and to what extent, within the proposed research period. It should not exceed 200 half-width or single-byte (or 40 if full-width or double-byte & half-width mixed, in case of Japanese) characters.</p> </div>		
	研究経費 (千円)	使用内訳(千円) Breakdown (1000 yen)	

- ① applicant
- ② Proposal for Grant-in-Aid
- ③ **Project Description File (Word)**
- ④ **application information (to be entered in the website)**
- ⑤ the research institution to which the applicant belongs
- ⑥ person in charge in the research institution + person in charge in the department
- ⑦ request for issue and acquisition of the applicant's ID and password for e-Rad
- ⑧ downloading of the Project Description File
- ⑨ sending the Proposal for Grant-in-Aid
- ⑩ **Proposal for Grant-in-Aid (PDF file)**
- ⑪ approval
- ⑫ rejection
- ⑬ only the person in charge of the research institution to which the applicant belongs
- ⑭ confirmation of the state of the application
- ⑮ the Japan Society for the Promotion of Science (JSPS)

Outline of the Electronic Application Procedures

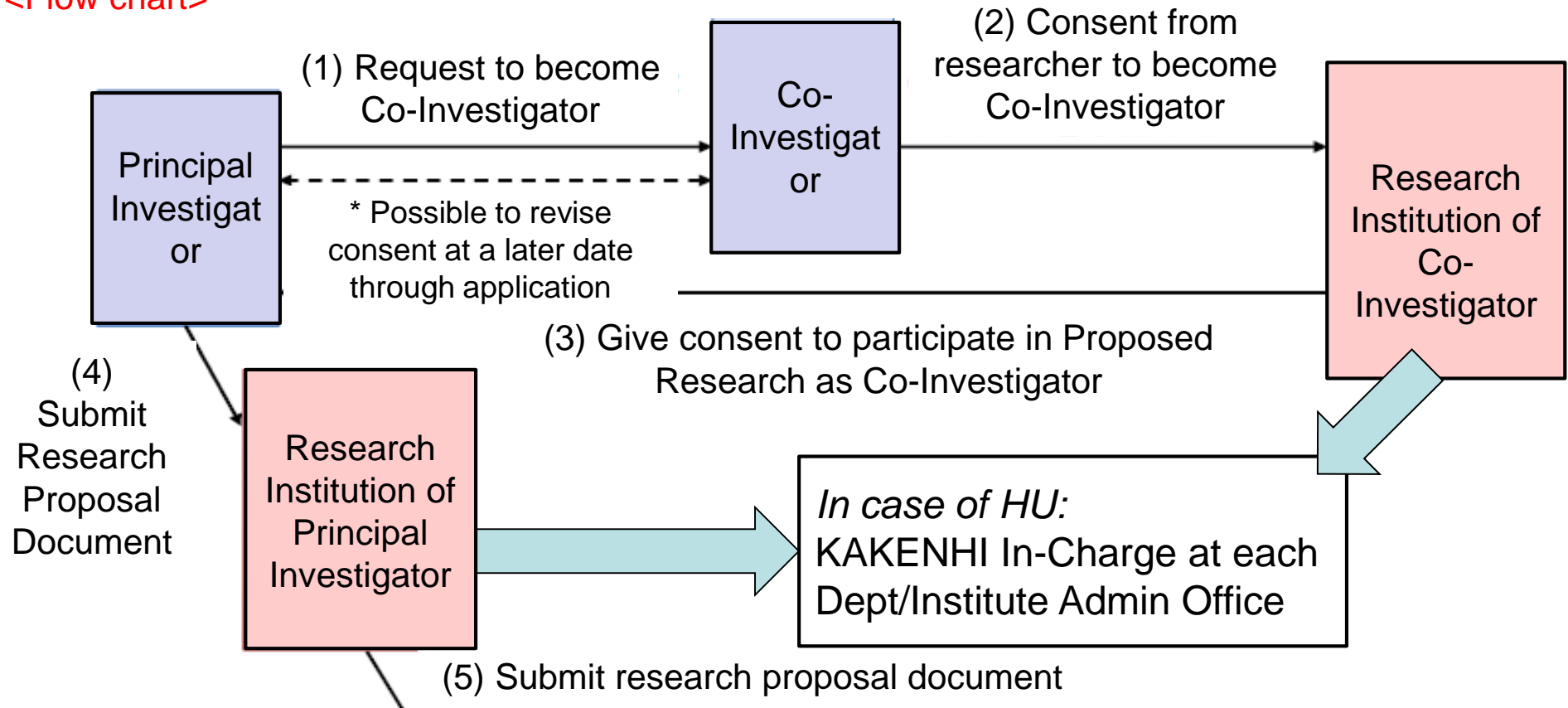


See Complete Application: (i) Cover page (Web) + (ii) Proposal (incl. (iii) Budget section (Web) distributed.

Flow-chart Related to Submission of KAKENHI

Consent of Co-Investigator through Web Input (No option of *Collaborating Researcher anymore!*)

<Flow chart>



Japan Society for Promotion of Science

* The complete procedure is materialized electronically. **Ensure to get consent well in time before submission.**

**Slides showing the Log-in to
the Online Application System
(for new applicants)**

KAKENHI Online Application Procedure (p.1)

(1) Log-in to the top page: <http://www-shinsei.jsps.go.jp/kaken/index.html>

(1) Click 「Japanese → English」 and switch to English Page. (2) Click 「Researcher login」.

Japanese page

The screenshot shows the Japanese homepage of the JSPS Electronic Application System. At the top left, it says 'JSPS 科研費電子申請システム'. On the right, there are links for '独立行政法人 日本学術振興会' and '電子申請のご案内総合トップページ'. Below this is a navigation bar with 'トップページ', '研究者の方 向け情報', '所属研究機関担当者 向け情報', 'ご利用にあたって', and 'お問い合わせ先'. A red box highlights the 'Japanese → English' link. Below the navigation bar is a large green-bordered box with the title '科研費電子申請システムへのアクセスについて' and a paragraph of text explaining login procedures after password changes. A red arrow points from the 'Japanese → English' link to the English page screenshot below.

English page

The screenshot shows the English homepage of the JSPS Electronic Application System. At the top left, it says 'JSPS Electronic Application System for Projects Funded by Grants-in-Aid for Scientific Research'. On the right, it says 'Japan Society for the Promotion of Science'. Below this is a navigation bar with 'English → Japanese'. Below the navigation bar is a large blue-bordered box with the title 'Accessing the Electronic Application System' and a paragraph of text explaining login procedures after password changes. A blue button labeled 'Researchers login' with a right-pointing arrow is on the right side of the box.

Downloading the Manual: <http://www-shinsei.jsps.go.jp/kaken/docs/manual1ka-E.pdf>

(p.2)

Applicant Log-in「応募者ログイン」Page is shown.

Enter e-Rad 「ID」、「Password」 and click Log-in [ログイン].

JSPS
科研費電子申請システム

ヘルプ
Help

応募者ログイン
Applicant Login

ID ▶

パスワード
(Password) ▶

▶ ログイン
Log in

※ e-RadのログインID・パスワードを入力してください。
※ e-RadのログインID・パスワードが分からない場合は、所属している研究機関の事務局等に確認してください。

*Enter your e-Rad log-in ID and password.
*If you don't know your e-Rad log-in ID and/or password, check with the relevant office/section of your research institution.

Note: Enter the capital & small letters, numbers and other characters correctly.

e-Rad ID and password for each researcher is issued by the office-in-charge of HU. If you lost these, contact the officer to confirm the details and reissue for you.

After Log-In, you may be asked to register your e-mail addresses (primary and optional). If so, please enter currently valid e-mail addresses.

Check and update
your e-Rad

応募者向けメニュー (Menu for Applicant)

北海道大学
創成研究機構

応募者向けメニュー Menu for Applicant

研究者情報確認
Researcher Information Check

▶ e-Radで登録された研究者情報を確認する
Check researcher information registered with e-Rad

研究者情報を確認する
Check researcher information

Select the category to
submit your
application and go
ahead following the
instructions.

▶ 応募を開始する
Start the application process

特別推進研究
Grant-in-Aid for Specially Promoted Research

新学術領域研究 (研究領域提案型) (継続の研究領域・終了研究領域)
Grant-in-Aid for Scientific Research on Innovative Areas
(Continued or Finished Research Area)

About “KAKENHI Research Proposal Archive”

A newly constructed archive of past KAKENHI proposals is accessible since last year for HU Teaching Staff holding SSO ID. The web portal is currently in Japanese. To assist users with no knowledge in Japanese, we have added brief guides as shown by the links.

<https://u4u.oeic.hokudai.ac.jp/en/kakenhi-hokudai/tools/>

Tools for Applying

KAKENHI Research Proposal Document Archive “採択済科研費申請書閲覧システム”

This is a support system to browse the Hokudai researchers' applications accepted in the past. The system can be accessed only via SSO system. Currently, most of the proposals on the system are in Japanese with only a few in English.

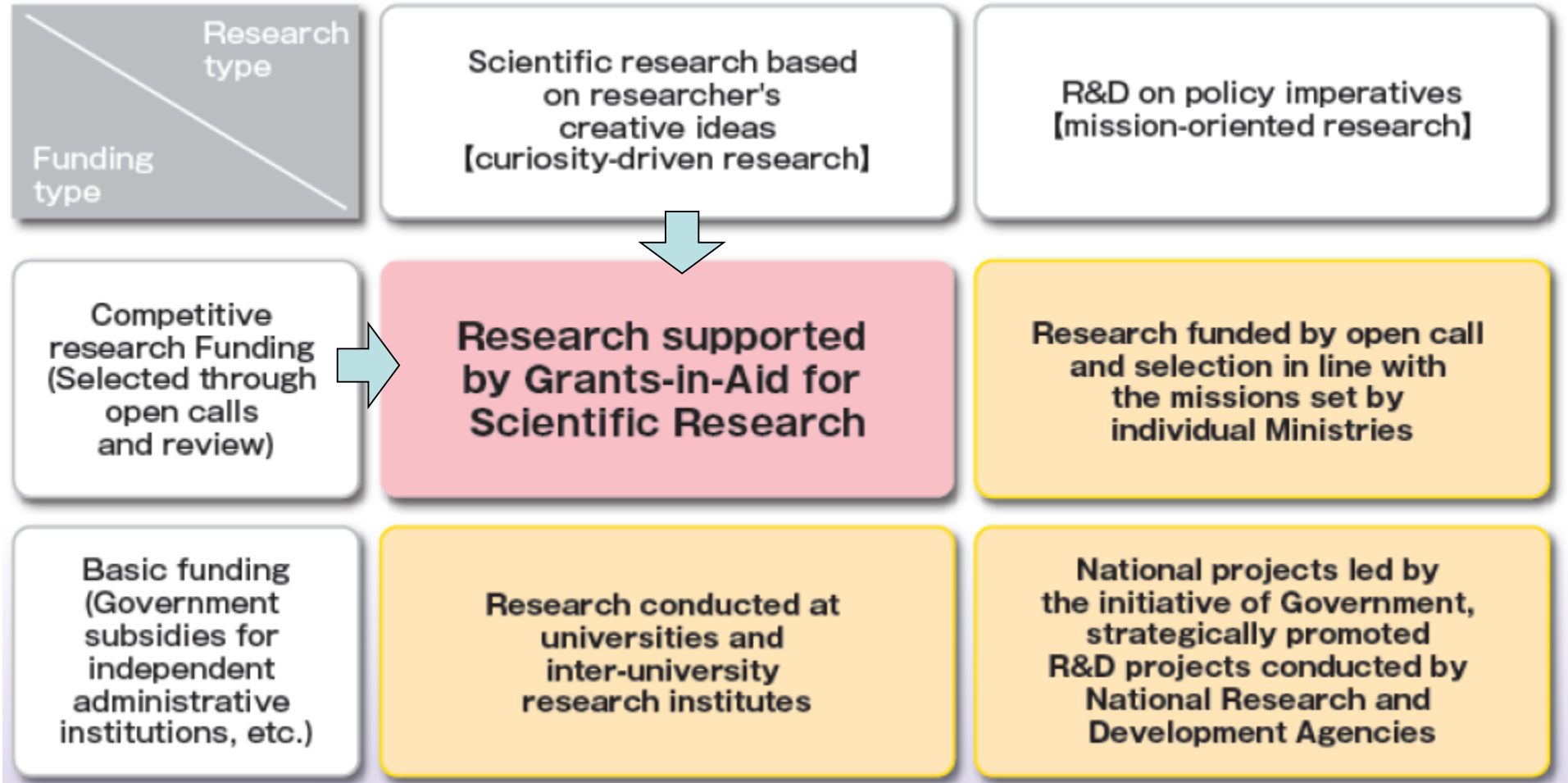
The guide how to access the archive is available below:

[System access manual](#)

[Accessing and archiving proposals](#)

Slides related to the KAKENHI system, grant categories, review sections, assessment criteria, effort ration etc. from previous years

The placement of “KAKENHI” in the policy on the promotion of science, technology and scientific research in



Summary - FY2018 Reform of the KAKENHI Review System

Diverse scientific research based upon free ideas advanced by KAKENHI open-recruitment and review

Former Review System
(in and before FY2017 Grant)

Recruit/review applications in more than 400 research fields

*Most of applications are for Scientific Research (C): 321 fields subdivided into 432 Review Sections.

Scientific Research (S)
Scientific Research (A)
(B)
(C)
Young Scientists (A)
(B)

- Fields in most research categories reviewed in same method.
 - 2-tier review: document and panel review conducted by different reviewers
- * The "Challenging Research" which "Challenging Exploratory Research" was evolved/reformed and newly introduced at FY2018 Grants is classified as "Medium-sized Section" and is prior to implementation by "Comprehensive Review".

Abolish "List of Categories, Areas, Disciplines, and Research Fields"

New Review System

New Review Section Table and Review System From FY2018 Grants
(from the September 2017 call for proposals)

Broad Section
(11 sections recruited/reviewed)
Medium-sized Section compiled into one Review Section.

Scientific Research (S)

Medium -sized Section
(65 sections recruited/reviewed)
Basic Section compiled into one Review Section.

Scientific Research (A)
Challenging Research

Basic Section
(306 sections recruited/reviewed)
Review Sections for various already cultivated science.

Scientific Research (B)
(C)
Early-Career Scientists

Comprehensive Review
— More diversified —

Same group of researchers comprising various fields conduct document and panel reviews from wide perspective.

*With Scientific Research (S), review comments are used.

- By reviewing grant proposals from multifaceted perspective, projects with high potential selected.
- Comments on how to improve research plans are fed back to applicants.

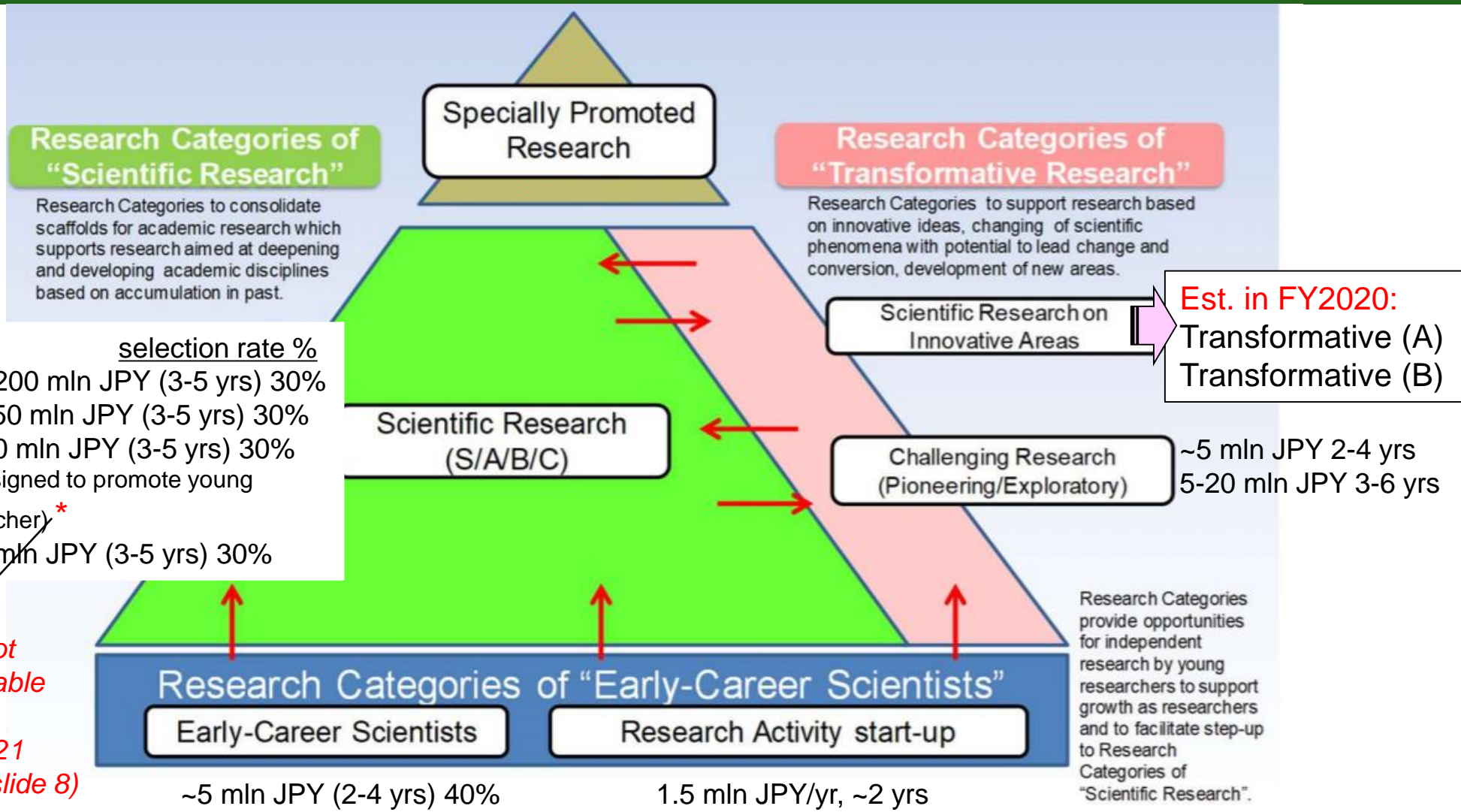
Two-Stage Document Review
— More efficient —

In adopting grant awardees, same group of researchers carries out two document reviews.

- Each reviewer in the group given a chance to reconsider his/her results by referring to other reviewers' evaluations in second round.
- More efficient as it eliminates need for the group members to meet to do panel review.

※1 The Review Section for the large-scale research category ("Grant-in-Aid for Specially promoted Research", "Grant-in-Aid for Scientific Research on Innovation Areas") which have been reviewed on "category unit" of Humanities and Social Sciences, Science and Engineering, Biological Sciences. etc. is basically implemented it as it is. As for the review method, we plan to gradually improve it after the review progress of the event.

Function and Structure of some KAKENHI Research Categories 21



On the provision of “New Application Made in the Fiscal Year Previous to **22** the Final Year of the Research Period of an On-Going KAKENHI Project”

Principal Investigator of an on-going KAKENHI Project (for which FY2020 is the last year and corresponds to either (i) “Specially Promoted Research” or “Scientific Research” (Scientific Research B & C), but not “Research in Generative Field”, with a period of 4 years or more, or (ii) “Early-Career Scientists” research with a period of 3 year or more) wishing to reconstruct the research plan can submit application under the provision for “New Application Made in the Fiscal Year Previous to the Final Year of the Research Period of an On-Going KAKENHI Project”.

The same provision applies also to Early-Career Scientists Projects adopted in FY2017 **or earlier**.

Only a single new research proposal can be submitted on the basis of restructuring the ongoing project.

■ Grant types allowed under this special scheme

On-going Grant type	Research Period (yrs)	Eligible grant types for new application
Scientific (S)	5	Specially Promoted Research, Scientific Research (S,A,B,C)
Scientific (A)	4 to 5	Specially Promoted Research, Scientific Research (S,A,B,C)
Scientific (B)	4 to 5	Specially Promoted Research, Scientific Research (S,A,B,C)
Scientific (C)	4 to 5	Specially Promoted Research, Scientific Research (S,A,B,C)
Early-Career Scientists (A)	4	Scientific Research (S,A,B,C)
Early-Career Scientists/	4	Scientific Research (S,A,B,C)
Early-Career Scientists(B)	3	Scientific Research (S,A,B) since FY2018

- If the application submitted is not adopted, you can continue implementing the On-Going KAKENHI Project (*So, no risk involved!*)
- This option can be used to challenge submitting applications for large-scale grant type. Check if you are eligible for [Support program to promote adoption for large-scale kakenhi project types](#) Oogata-kenkyu-syumoku-saitaku-kasoku-shien-jigyuu (kiban kenkyu S, A) offered at HU.

https://www.jsps.go.jp/english/e-grants/data/r03/review_section_table.pdf

The Review Section Table (Overview)

Broad Section A		Medium-sized Section 1 : Philosophy, art, and related fields		Basic Section		01010 Philosophy and ethics-related		01020 Chinese philosophy, Indian philosophy and Buddhist philosophy-related		05020 Public law-related		International law-related	
Broad Section A (continued)		Medium-sized Section 9 : Education and related fields		Basic Section		09010 Education-related		09020 Sociology of education-related		09030 Childhood and nursery/pre-school education-related		11010 Art-related	
Broad Section C		Medium-sized Section 18 : Mechanics of materials, production engineering, design engineering, and related fields		Basic Section		18010 Mechanics of materials and materials-related							

- Medium-sized Section consists of several Basic Sections.
- [xx and related fields] at the end implies that it is not rigid or strictly defined

- Each Basic Section has a number.
- [xx -related] at the end implies that it is also not rigidly defined. → flexibility!

- Broad Section has Alphabet (A, B, C,...)
- Each Broad Section consists of several Medium-sized Sections.
- The overall content of each Broad Section is defined by the contents of the Basic Sections and Medium-sized sections comprising it.

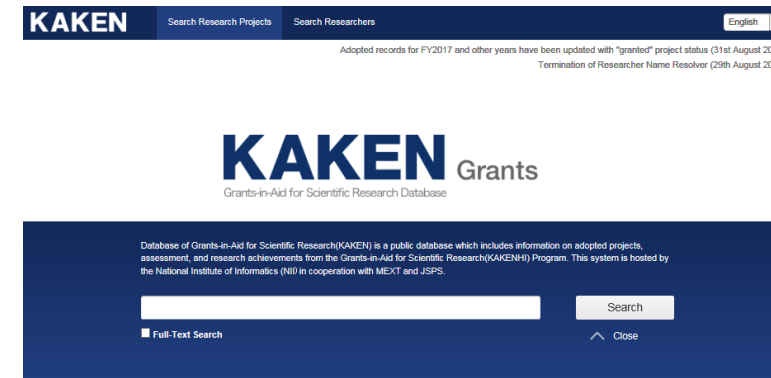
- Consult KAKENHI database webpage (for information on researchers and fields selected for at least past 3 years) <https://kaken.nii.ac.jp/en/>
- Check the Assessment Criteria (see also slide 30) https://www.jsps.go.jp/j-grantsinaid/01_seido/03_shinsa/data/h30/h30hyoutei03_en_general.pdf
Check the Committee and Reviewers list (for previous years, available *in Japanese*) https://www.jsps.go.jp/j-grantsinaid/14_kouho/meibo.html

For the 1st stage screening (2017)

https://www.jsps.go.jp/j-grantsinaid/01_seido/03_shinsa/shinsa_meibo/first_29.html

Acknowledging the receipt of KAKENHI in scholarly works:

- Include “MEXT/JSPS KAKENHI Grant Number JPxxxxxxx”, where xxxxxxxx refers to the 8-characters long Grant Number
- Example in Acknowledgment for 2 projects in a paper:
This work was supported by JSPS KAKENHI Grant Numbers JP15K45678, JP16H45678.



Research Project Title Project/Area Number

Possible to search by:

Free word

Research project title

Project type

Research field

Research category

Research institution, etc.

Rating Elements

- (1) Academic Importance and Validity of Research Projects
- (2) Validity of Research Objective and Research Method
- (3) Appropriateness of Ability to Conduct
- (4) Ripple Effect of Research Project

Scores for each element:

- 4 (Excellent)
- 3 (Good)
- 2 (Somewhat insufficient)
- 1 (Insufficient)

Overall Score and review comments by reviewers in the first stage review:

- (1) Convert the scores to 4 grades according to the following distribution:
4: Very good(10%); 3: Good (20%); 2: Usual (40%); 1: Inferior(30%), - (conflict of interest) –
- (2) Review comments (only in the first stage) → for use by reviewers in the 2nd review stage.
 - Focus on pros and cons of the research project
 - For “interested” projects, write down the reason
 - Attach overall score (ignore "The Status of application .." and "Issues relevant to Huma..")
 - Examine the "The Status of application..." and mention if “unreasonable duplication and/or excessive concentration in the grant allocation” is foreseen.

(for projects in border and with extremely low scores by some reviewers):

For each project to be reviewed in the second stage, conduct comprehensive evaluation with focus on the rating elements (1) to (4), review comments etc. of all reviewers, assign 4 grades as follows: **A (top priority); B (positive); C (may be adopted); D (others); - (conflict of interest)**

Items to be checked for Validity of Research Expenditure:

- (i) Is the content reasonable and effective use expected ?
- (ii) Is anything (e.g., fund for purchasing equipment) truly necessary to carry out the research plan?
- (iii) Will the funds, for which the proposed expenditure for equipment, travel expenses, personnel cost/honoraria is in excess of 90% , be used effectively ?

1st Stage

2nd Stage

Summary of Major Points Related to the Research Proposal

- Each reviewer handles 80-100 applications, during a short period that includes the New Year's holidays, and spends 30 min to 2 hours to read and evaluate each proposal. So, writing should be concise & precise, understandable by non-specialist reviewers, preferably with diagrams.

	Section in Research Proposal	Items to be included
1.	Research Objectives, Research Method, etc.	(i) Scientific background of the proposed research: <u>Key scientific question</u> (ii) The purpose, scientific significance, and originality of the research project* (iii) What will be elucidated?, and to what extent? (iv) Concrete description of the roles of PI and the CO-I(s)
2.	Research Development Leading to Conception of the Present Research Proposal, etc.	(i) Applicant's research history and conception of the research proposal (ii) Preparation status and feasibility of the research plan (iii) Domestic & overseas trends of proposed research), and its position in relevant field
3.	Applicant's Ability to Conduct the Research and the Research Environment	(i) Applicant's hitherto research activities (evidences to support the feasibility of proposed research). Leave of absence from research (e.g. due to maternity and/or child-care, or other valid reasons), if any (ii) Research environments (incl. research facilities, equipment, materials, etc.)
4.	Issues Relevant to Human Right Protection and Legal Compliance	As applicable.

* Besides the results expected, ripple effects such as practical applications fit this section.

Research Organization

Good organization is an absolute necessity

- Are there any project members just for the sake of name?
- Are there too many members?
- Are there members from fields irrelevant/unsuitable to the proposed research ?
- Did you obtain prior consent for joint application from all the members included?

Composition of project members

Investigator type		Requirement and others
Principal Investigator (Project member) PI	<i>daihyou-kenkyusha</i>	Eligible for application (e-Rad registration) Full responsibility for the implementation of the research project Summarizing of the research achievements in Japanese
Co-Investigator Co-I	<i>kenkyu-buntansha</i> (Member of the funded project; cooperator)	Eligible for application (e-Rad registration) Engages in research activity, collaborating with PI and sharing responsibility Eligible for a share of the funds from PI and use at own discretion
Joint Researcher	<i>kenkyu-kyouryokusha</i> (cooperator to PI, Co-I for implementation of the project)	No need to be eligible for e-Rad registration *PDs, RA, JSPS Research Fellows and researchers from company or foreign institutions can be included here. No discretion regarding the use of grant funds themselves, but can be invited by PI or Co-I. Starting FY2019 Applications, you can mention them within the main application (sections such as “research objectives”, “research methods” etc.).

- Effort ratio = (Hrs. allocated for the specific activity) ÷ (Total hrs. allocated for all productive activities)
- Effort ratio for Principle Investigator is typically **10-30%**.
- Allocate 30-50% if you are **young**, you are conducting the project as **PI**, and the project is your **first priority**. For the accepted projects, the effort ratio ranges between 5% and 60%.
- Put a **PLAUSIBLE** effort ratio. Ask your peer/supervisor for the effort ratio specific to your field.

Example1: Effort rate 10%

(i) For a researcher, with the following time allocated for all productive activities,

Mon.-Fri.: 8AM to 8PM

12hrs/day × 5days = 60 hours

Sat. Sun : Total 10 hrs.

Total amount of time spent for the productive hours per week is **70 hrs.**

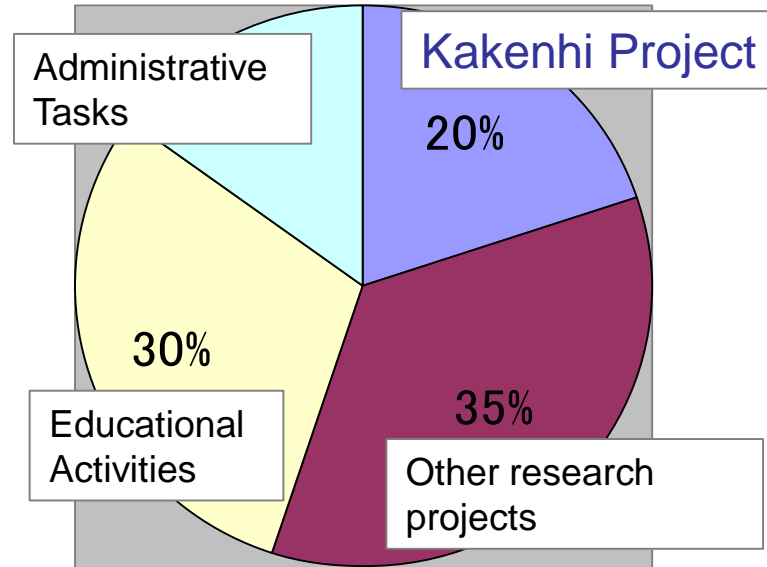
(ii) So, an effort rate of **10% will be, 10% of 70 hrs = 7 hrs.**

Hence, putting 10% effort for kakenhi project means spending 7 hrs. per week on the proposed research.

Example2:

Chart showing an effort rate of 20% for Kakenhi

Division of total time allocated for productive activities

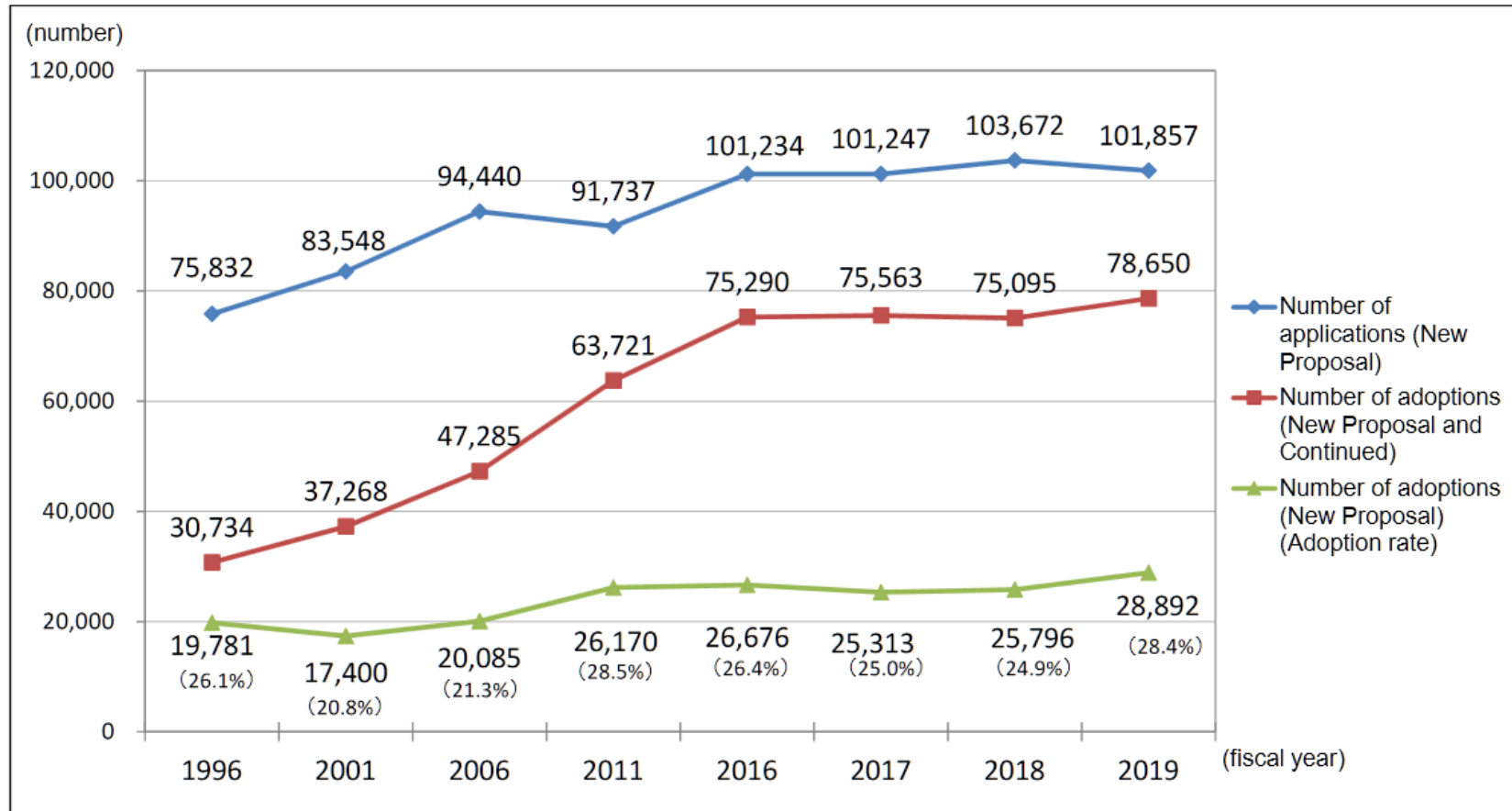


FY2019 Selection Rate of Young Researchers in Scientific Research Categories

Category		Number of Applications		Selection rate (%)
		Submitted	Selected	
Scientific (A)	<= 39 yrs	84	29	34.52
	Overall	2,412	605	25.08
Scientific (B)	<= 39 yrs	1,368	473	34.58
	Overall	11,396	3,327	29.19
Scientific (C)	<= 39 yrs	4,751	1,945	40.94
	Overall	45,758	12,918	28.23

Source: MEXT kakenhi explanation material 2019/9 Fukuoka

Trends in KAKENHI Applications, Adoptions, and Adoption Rate for Main Research Categories 30



In FY2019, shown are the KAKENHI research categories: “Specially Promoted Research”, “Scientific Research on Innovative Areas” (Planned Research and Publicly Offered Research), “Scientific Research” (excluding “Generative Research Fields”), “Challenging Exploratory Research”, “Challenging Research” (excluding “Generative Research Fields Review Division”), “Early-Career Scientists”, “Young Scientists”, “Research Activity Start-up”, and “Fund for the Promotion of Joint International Research (Fostering Joint International Research (B))”.