Basics of KAKENHI and What's New in FY2019

Gakuta Toba, PhD
Research Administrator (URA)
Research Administration/Management Office
Outline

- Basic Information on KAKENHI
  - What is KAKENHI?
  - Popular KAKENHI Categories
  - Schedule for KAKENHI Application

- Peer Reviewing Process
  - Two-Stage Document Review
  - Reviewing Criteria
  - Think about the Reviewers When Writing Your Proposal

- What's New in FY2019
  - "Applicant’s Ability to Conduct the Research" Section

- URA's Service for KAKENHI Application

- Sources of Information
What is KAKENHI?

"Grants-in-Aid for Scientific Research"

KAKENHI is the most important research funding for most researchers in Japanese universities.

KAKENHI is the only research grant that supports researches based on the free ideas of researchers in all research fields.
## Popular KAKENHI Categories

<table>
<thead>
<tr>
<th>Formal Name</th>
<th>Short Name</th>
<th>Total Grant Money (M yen)</th>
<th>Acceptance Rate FY2017 [U Tsukuba]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific Research (A)</td>
<td>Kiban (A)</td>
<td>20-50</td>
<td>24.8% [30.0%]</td>
</tr>
<tr>
<td>Scientific Research (B)</td>
<td>Kiban (B)</td>
<td>5-20</td>
<td>24.7% [29.0%]</td>
</tr>
<tr>
<td>Scientific Research (C)</td>
<td>Kiban (C)</td>
<td>Up to 5</td>
<td>29.6% [40.0%]</td>
</tr>
<tr>
<td>Early-Career Scientists</td>
<td>Wakate</td>
<td>Up to 5</td>
<td>(Wakate B) 30.2% [43.2%]</td>
</tr>
<tr>
<td>Scientific Research on Innovative Areas</td>
<td>Shin Gakujutsu, Kobo</td>
<td>Up to 2-14 (depending on the Area)</td>
<td>ND [22.0%]</td>
</tr>
<tr>
<td>Challenging Research (Exploratory)</td>
<td>Hoga</td>
<td>Up to 5</td>
<td>10.9% [12.2%]</td>
</tr>
</tbody>
</table>

**Main Project**
- Grant Money
- Less than 8 yrs after PhD

**Additional Project**
- Pre-determined research areas
- "Transformative researches"
Wakate (Early-Career Scientists)

- Eligibility:
  - Less than 8 years after obtaining PhD, or
  - Non-PhD researcher who is less than 40 years old
- Grant money up to 5 M yen
- Research period: 2-4 years
- Acceptance rate = 30.2% (Japan), 43.2% (U Tsukuba).

If you are new to KAKENHI and eligible, Wakate would be the first choice
Kiban (C) (Scientific Research (C))

• No restriction on career or age
• Grant money up to 5 M yen
• Research period: 3-5 years
• Acceptance rate = 29.6% (Japan), 40.0% (U Tsukuba).

If you are new to KAKENHI and not eligible for Wakate, Kiban (C) would be the first choice.
For an Additional Project

**Shin Gakujutsu** (Scientific Research on Innovative Areas)
- Can apply for in addition to Kiban (A/B/C) or Wakate
- **Pre-determined Research Areas** (39 Areas for FY2019)
  - [http://www.mext.go.jp/a_menu/shinkou/hojyo/kenkyuryouiki/1386952.htm](http://www.mext.go.jp/a_menu/shinkou/hojyo/kenkyuryouiki/1386952.htm)
  - [http://www.mext.go.jp/a_menu/shinkou/hojyo/kenkyuryouiki/1406968.htm](http://www.mext.go.jp/a_menu/shinkou/hojyo/kenkyuryouiki/1406968.htm)
- Up to 2-14 M yen (depending on the Area), 2 years
- Acceptance rate = 22.0% (U Tsukuba)

**Hoga** (Challenging Research (Exploratory))
- Can apply for in addition to Kiban (A/B)
- For researches that have the potential to **radically transform the existing research framework and/or direction**
- Up to 5 M yen, 2-3 years
- Acceptance rate = 10.9% (Japan), 12.2% (U Tsukuba).
Selection of Review Section

- Basically, you should choose a section that is most relevant to your proposed research.
- However, consider the possibility of an alternative choice that makes your proposed research more appealing.

<table>
<thead>
<tr>
<th>Broad Section G</th>
<th>Broad Section H</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Medium-sized Section 43: Biology at molecular to cellular levels, and related fields</strong>&lt;br&gt;43010 Molecular biology-related&lt;br&gt;43020 Structural biochemistry-related&lt;br&gt;43030 Functional biochemistry-related&lt;br&gt;43040 Biophysics-related&lt;br&gt;43050 Genome biology-related&lt;br&gt;43060 System genome science-related</td>
<td><strong>Basic Section</strong>&lt;br&gt;<strong>Medium-sized Section 47: Pharmaceutical sciences and related fields</strong>&lt;br&gt;47010 Pharmaceutical chemistry and drug development sciences-related&lt;br&gt;47020 Pharmaceutical analytical chemistry and physicochemistry-related&lt;br&gt;47030 Pharmaceutical hygiene and biochemistry-related&lt;br&gt;47040 Pharmacology-related&lt;br&gt;47050 Environmental and natural pharmaceutical resources-related&lt;br&gt;47060 Clinical pharmacy-related</td>
</tr>
<tr>
<td><strong>Medium-sized Section 44: Biology at cellular to organismal levels, and related fields</strong>&lt;br&gt;44010 Cell biology-related&lt;br&gt;44020 Developmental biology-related&lt;br&gt;44030 Plant molecular biology and physiology-related&lt;br&gt;44040 Morphology and anatomical structure-related&lt;br&gt;44050 Animal physiological chemistry, physiology and</td>
<td><strong>Basic Section</strong>&lt;br&gt;<strong>Medium-sized Section 48: Biomedical structure and function and related fields</strong>&lt;br&gt;48010 Anatomy-related&lt;br&gt;48020 Physiology-related&lt;br&gt;48030 Pharmacology-related&lt;br&gt;48040 Medical biochemistry-related</td>
</tr>
<tr>
<td><strong>Medium-sized Section 49: Pathology, infection/immunology, and related fields</strong>&lt;br&gt;49010 Pathological biochemistry-related</td>
<td></td>
</tr>
</tbody>
</table>

Schedule for KAKENHI Application

Sep 1st  Call for Application

2nd week of Oct  Faculty Office (Shien-shitsu) Deadline

Last week of Oct  University Deadline

2nd week of Nov  JSPS Deadline
Peer Reviewing Process (Kiban (B/C) and Wakate)

Two-Stage Document Review

First Stage:
• Four or six reviewers read your proposal.
• Each reviewer gives an overall score in 4 grades to each proposal.

Second Stage:
• The same reviewers review boarder-line proposals.
• Reviewers read review comments by other reviewers too.
• Each reviewer gives an overall score in 4 grades to each proposal again.
First Stage Scores Mostly Determine the Outcome

- A reviewer gives a relative score to each proposal within the Review Section.
- Scores are distributed in a predetermined ratio.

### Overall Score Distribution

<table>
<thead>
<tr>
<th>Overall Score</th>
<th>Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 (Excellent)</td>
<td>10%</td>
</tr>
<tr>
<td>3</td>
<td>20%</td>
</tr>
<tr>
<td>2</td>
<td>40%</td>
</tr>
<tr>
<td>1 (Poor)</td>
<td>30%</td>
</tr>
</tbody>
</table>

Acceptance rate is about 30%
What are the Reviewing Criteria?

1) Academic importance and validity of research project
2) Validity of research objective and research method
3) Appropriateness of ability to conduct research and research environment
4) Ripple effect of research project

You must convince reviewers that your project meets all of these points.
What are the Reviewing Criteria?

1) Academic importance and validity of research project
2) Validity of research objective and research method
3) Appropriateness of ability to conduct research and research environment
4) Ripple effect of research project

You must convince reviewers that your project meets all of these points.
Think about the Reviewers When Writing Your Proposal

• Each reviewer must review 70-100 proposals in one month.
• Their expertise may be different from yours.
• They may not have good eyesight.
• They are probably stressed and don't have time.

It is a good idea to make your proposal:
• easy to understand (even for non-specialists)
• include visual presentation
• easy to read (e.g. avoid small letters)
• straightforward and simple
The Most Important Part of a Proposal

1. Research Objectives, Research Method, etc.

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]

First impression is extremely important!

[MAIN TEXT]

Clear and fascinating "key scientific question"
"Ability to Conduct the Research" Section (New in FY2019)

Previous: List of publication


4. xxxxxxxx........

New: Description

(1) Previous Research Activities
1. Novel Mechanism of Xxxxxxx
   The PI has been engaged in xxxx, and revealed xxxx for the first time (Smith et al. 2017 Journal of Xxxxxx). The finding had significant impact on xxxxxx, and changed xxxxxx.

2. Systematic Analysis of Xxxxxxx
   The PI learned xxxxxx technique from xxxxxxx, and xxxx........

(2) Research Environment
   (facilities, equipment, materials, advisors, etc.)
"Ability to Conduct the Research" Section (New in FY2019)

"(1) Previous Research Activities"

- Should be focused on the research activities relevant to the proposed research (because the purpose of the section is to show your capability to conduct the proposed research)
- If you have periods during which the researches were suspended (e.g. maternity leave, childcare leave), you may write about it here
- (Presenter's personal view) You can take advantage of this style and appeal your research achievements that cannot be shown in the list of publication (number of cites, impact on the field, requests for materials from other researchers etc.)
"Ability to Conduct the Research" Section (New in FY2019)

Reviewers will be referred to "Researchmap" and KAKEN database when reviewing a proposal.

https://researchmap.jp/

You should:

(1) Create your account at Researchmap, if you do not have one already
   *You will need the "Researcher Number" to create an account.

(2) Update your information at Researchmap, especially the list of publication.
KAKENHI Help Desk by URA

**Period:** From September 3 to October 12, 2018

**Place:** Research Administration/Management Office, 6F, Administration Center (Honbu Building)

**Targets:** Non-Japanese researchers in University of Tsukuba who wish to apply for KAKENHI grants for FY2019.

**Registration:** Visit the URL below, and register through the link on the page.

http://ura.sec.tsukuba.ac.jp/archives/16384
KAKENHI Proposal Revise Service by URA

You send us your draft proposal, and we send you our comments!

**Period:** Registration is open until September 24, 2018
(Please send us your draft until September 28, 2018)

**Targets:** Early-career researchers (less than 12 years after obtaining PhD as of April 1, 2019) who wish to apply for KAKENHI grants for FY2019.

**Registration:** Visit the URL below, and register through the link on the page.
http://ura.sec.tsukuba.ac.jp/archives/16377
Handbook for Writing a KAKENHI Proposal by URA

Please download it at the URL below:
http://ura.sec.tsukuba.ac.jp/archives/9729

The 2015 Edition is the latest version. Yes, it is a bit old, but most things still apply.
Sources of Basic Information on KAKENHI

Handbook on the Grants-in-Aid for Scientific Research (KAKENHI) Program
How to Make More Effective Use of the Program
(For Researchers)
FY2018 Edition

— In 2018, the KAKENHI marks the 100th anniversary of its foundation —
June 2018

Research Promotion Bureau, Ministry of Education, Culture, Sports, Science and Technology (MEXT)
Japan Society for the Promotion of Science (JSPS)

Handbook on the KAKENHI Program

KAKENHI Pamphlet
Application Procedures

Application Procedures by JSPS
(Everything else)

Application Procedures by MEXT
(Shin Gakujutsu)
Visit JSPS Webpage to Get Information

Google "JSPS KAKENHI"
Thank you!