FY2021

Leading Initiative for Excellent Young Researchers

Application Guidelines etc.

Science and Technology Policy Bureau, MEXT

April 2021

<Main changes in application for FY2021 from the previous fiscal year>

(1) Schedule for excellent young researchers (new applicants of FY2021)

- In the past, screening of application documents was conducted between May and June by the Selection Committee established within the Japan Society for the Promotion of Science, and, based on selection results, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) determined excellent young researcher (EYR) candidates in early July. In this fiscal year, however, those who wish to be EYRs shall first conduct the negotiation among the parties with a relevant university, company, or similar institution, and then, screening of application documents by the Selection Committee will be carried out between September and October with respect to both (i) those whose negotiation among the parties is completed by the last day of August and (ii) those whose negotiation among the parties is not completed by the last day of August.
- EYRs are determined by MEXT in October among new applicants, those who continue their candidate eligibility, and those considered to have the research ability equivalent to that of those who continue their candidate eligibility (to be discussed later) (i) whose negotiation among the parties is completed by the last day of August. They are determined in the order of completion of the negotiation among the parties as a general rule. (Please note that new applicants may not be selected as EYRs in view of selection results.)
- If the number of EYRs determined in October is less than the scheduled number of EYRs to be decided for FY2021 (20 people), EYRs will be determined as needed based on selection results from among those whose negotiation among the parties is completed in September or later.

(2) Negotiation among the parties by utilizing the JREC-IN Portal

- In cases where a company offering a post on JREC-IN Portal (although not offering a post in the Leading Initiative for Excellent Young Researchers (LEADER)) hires a new applicant or a person who continues his/her candidate eligibility, the subject post will be treated as being equivalent to the post offered under the LEADER only if the subject post is determined by MEXT that it satisfies the requirements for posts in the LEADER. Please note that a company hiring a new applicant or a person who continues his/her candidate eligibility and wishing for determination as an EYR needs to contact MEXT and ask for confirmation of whether the subject post satisfies the requirements for posts in the LEADER. In addition, if the hiring company wishes funding support, an application for the support needs to be submitted separately.

(3) Those considered to have the research ability equivalent to that of those who continue their candidate eligibility

- Among those who satisfy the age requirement of the LEADER and wish to have a stable and independent research environment in a company, those who are recognized by MEXT to have acquired transferable skills, etc. (i.e., those who completed the Strategic Professional Development Program for Young Researchers, those experienced with Research Fellowship for Young Scientists PD and/or DC, and those who completed the WISE Program [Doctoral Program for World-leading Innovative & Smart Education]) shall be treated as those considered to have the research ability equivalent to that of those who continue their candidate eligibility. If such persons have participated in an internship in the post offered by a company for the LEADER and completed the negotiation among the parties, they shall be treated as being eligible in the same manner as those who continue their EYR candidate eligibility.
- Note that, in this case only, it is an essential requirement to participate in an internship program at the company before carrying out negotiation among the parties (in cases other than this, participating in an internship program is not required for starting negotiation among the parties and the negotiation among the parties can be carried out without participating in an internship program).

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Description of terms

Definitions of terms related to this project are as follows.

[Negotiations among the parties]
The research institution that offers a post and excellent young researcher candidates or applicants shall make employment negotiations in which screening proceeds based on a transparent and fair selection process.

[Tenure Track System]
Personnel system that employs researchers and teachers in a form which fulfills the following requirements in order to clarify the career paths of young researchers and teachers.

1) To hire through a fair and highly transparent selection method such as international public invitation
2) To hire for a certain period of time (approximately 5 years)
3) To set highly transparent tenure review procedures before the expiration of term

[Principal researchers]
Researchers or teachers who are in a stage to become active as leaders of young researchers and teachers while taking responsibility as their chief in the independent research organizations.

[Young principal researchers]
Researchers or teachers who are at the early stage of independent researchers or teachers who conduct research in an independent research environment while receiving appropriate advice from the experienced researchers.

[Mentors]
Researchers or teachers who have experience and knowledge to give extensive advice to young principal researchers so they can learn how to manage laboratories and to become the head researcher in order to acquire external funds in pursuit of undertaking the research independently.

[Cross appointment system]
A system in which researchers or teachers can engage in work under the research institutions by signing employment contracts with universities and other institutions.

[Advance notice]

To proceed negotiation among the parties by mutual communications between a research institution and applicants or those who continue their candidate eligibility after publication of a post and before determination of excellent young researcher candidates. In this case, the research institution offering a post shall indicate the necessity of advance notice in the post information it publishes and clearly state the method of contact.

[Bridge promoters]
Agencies supporting negotiation among the parties. Private job placement agencies that have signed an outsourcing contract with MEXT provide support for the negotiation among the parties between research institutions and excellent young researcher candidates or applicants.

FY2021
Leading Initiative for Excellent Young Researchers

Application Guidelines

Science and Technology Policy Bureau, MEXT

April 2021

<Application Guidelines Table of Content>

I. Overview of Leading Initiative for Excellent Young Researchers

1. Project Objectives

In recent years, short-term employment and job insecurity for young researchers have meant that the environment for them is conducive to neither challenging new areas of research nor to creative achievement. This has raised concern that the advance of Japan's scientific, technological and academic research cannot be sustained. In addition, low researcher mobility across industrial, academic and governmental sectors means knowledge is not transferred among researchers, making it difficult to deal with the global and rapid structural transformation of industry.

It is important, meanwhile, that universities, public research institutions, corporations and similar organizations take full responsibility to tackle career formation and development of young researchers in order to secure diversity, development and the success of human capital. The young researchers themselves must become aware of the need to carve out their own careers, enhance their own abilities, and take advantage of those abilities in a wide range of societal situations.

Against this backdrop, we conduct the Leading Initiative for Excellent Young Researchers (LEADER) in order to show new career paths to young researchers which they can succeed with, for example in industry circles, while creating through industry, academia, and government a stable and independent position for young researchers who would tackle new areas of research.

2. Project outline

In this project, we will provide support to the research institutions of the industry-academia-government when young researchers with motivation and flexibility who can make developments in new research areas obtain stable and independent research environments in the said institution.

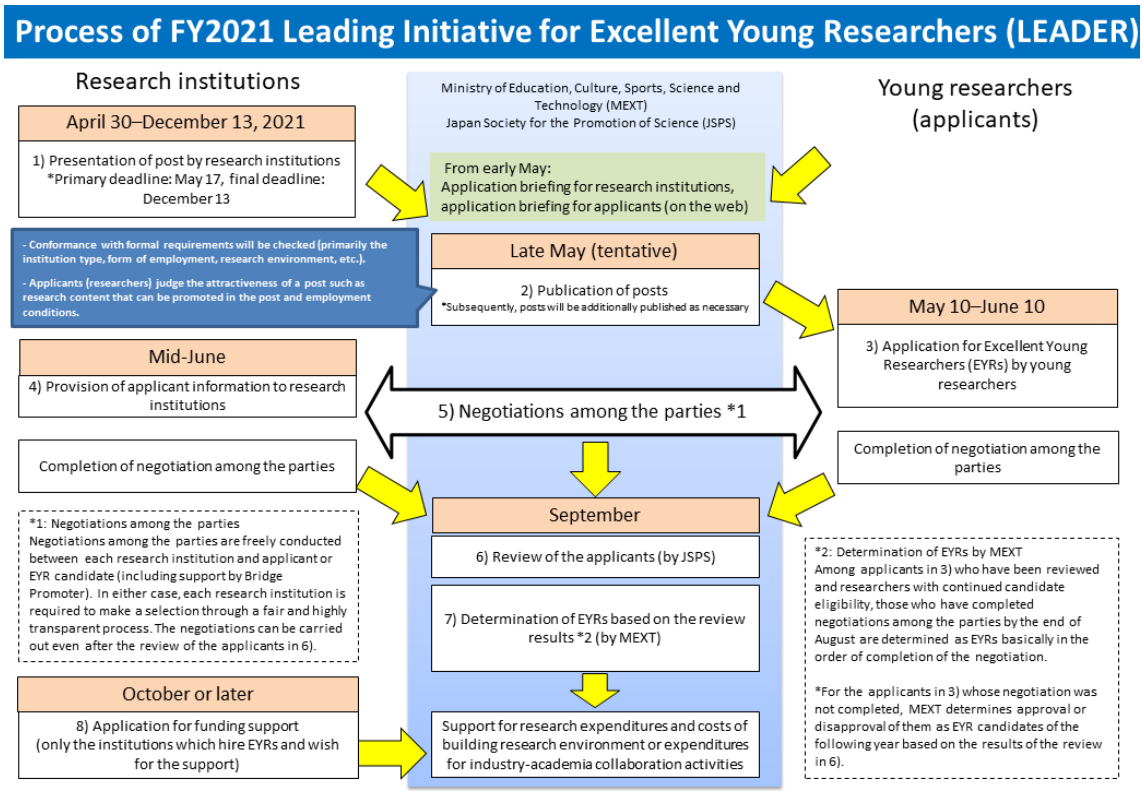
First, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) invites posts from the research institutions that wish to participate in this project, and then publicizes those posts after satisfying the requirements through the website of MEXT or a neutral public institution. In parallel with this, we will publicly offer a post of excellent young researchers (EYRs) for young researchers who are motivated to tackle new areas of research and conduct research in a new place of research. Next, each research institution offering a post negotiates with applicants (young researchers) individually (hereinafter, the “negotiation among the parties”). Furthermore, a neutral public institution conducts a review of the young researcher applicants based on the purpose of this project, and MEXT determines excellent young researcher candidates (hereinafter, “EYR candidates”). As a result, if the EYR candidates obtain a stable and independent research environment in research institutions, MEXT determines those

candidates as EYRs and provides a support of research expenditures, etc. as needed for a specified period of time.

In the FY2021 public offering, the Japan Society for the Promotion of Science (hereinafter referred to as "JSPS") supports MEXT as a neutral public institution on the review of this project.

Please be aware in advance that the contents of this project may change depending on the budget situation.

Entire schedule regarding public offering in FY2021



II. Application Contents

1. Posts requirements that are to be publicized (Research institutions)

Only posts that meet the following requirements are to be publicized:

a. Requirements for research institutions

The institutions must fall under any of the following:

- Universities (prescribed in Article 1 of the School Education Act (Act No. 26 of 1947).)

according to the provision in Article 109 of the School Education Act.

- Inter-University Research Institute Corporations, which are prescribed in paragraph 4, Article 2, National University Corporation Act (Act No. 112 of 2003).
- Colleges of technology (colleges of technology prescribed in Article 1 of the School Education Act)
- National Research and Development Agencies, which are prescribed in paragraph 3, Article 2 of the Act on General Rules for Incorporated Administrative Agencies (Act No. 103 of 1999).
- Public test and research institutes (institutes established by municipal governments, which conduct tests and research and provide technical guidance relating to local industry promotion). *The test and research laboratories, inspection and certification institutes, educational and training facilities (including institutes and facilities similar thereto), medical and rehabilitation facilities, reformatory and internment facilities, and work facilities that are established in the administrative organs (ministries, commissions, and agencies) prescribed in paragraph 2, Article 3 of the National Government Organization Act may offer posts for this project, but no funding support is available.
- Companies or similar entities having corporate status in Japan (including general incorporated associations and general incorporated foundations [including public interest incorporated associations and public interest incorporated foundations that have been authorized by relevant government agencies]; engaged in research and development activities)

b. Areas of research of posts to be publicized

Areas of research are all areas of humanities, social sciences, and natural sciences.

So, the posts to be publicized shall be based on the future plans of the institution under the leadership of the institute director (e.g.: a president of university) and satisfy any form of employment shown below. In principle, an annual salary system is applied to the pay structure.

- Employment is to be carried out under the tenure-tracking system or another similar fair, transparent, and stable personnel system. Furthermore, a research institution that applies a certain fixed-term employment system setting a limitation on the number of reappointment to all higher ranking positions (equivalent to professors) can employ a person in the post according to regulations, etc. formulated/published by research institutions.
- Indefinite-term employment.

c. Research environment

1) Build an independent research environment so that EYRs can set their own research

themes by themselves and carry out the research. (e.g. placement of mentors, provide assistance for raising research funds, improve the research support system, ensure the research space, placement of shared equipment, assignment of graduate students to laboratories as chief advisors, etc.) However, based on consultation with the research institution to which they belong, it is possible for the EYRs to change a part of their research subject.

2) Assuming total office hours per year of 100%, in principle, EYRs should spend 50% or more on making efforts to conduct research activities for 5 years after employment (within the range of 50 % or more, it is acceptable to set this to 70% or 80% depending on features of a research institution).

*EYRs are expected to proactively work with research institutions all over Japan in their respective fields. Furthermore, it is also desirable for the EYRs to actively utilize the cross appointment system in each research institution (assuming between different kinds of institutions such as universities and companies).

<Reference>

- Basic framework and notes on the cross appointment systems (December 26, 2014, Ministry of Economy, Trade and Industry, Industrial Science and Technology Policy and Environment Bureau, Ministry of Education, Culture, Sports, Science and Technology, Higher Education Bureau) (particularly, “Section 2-3, Recommended examples of cross appointment system based on temporary transfer”)
(URL: https://www.meti.go.jp/policy/innovation_corp/cross_appointment.html)
- Guideline to strengthen joint research through industrial-academic-government cooperation (November 30, 2016, Secretariat of the Council for industry-academia-government cooperation to promote innovation) (specifically, “2. (4) (4-1) Promotion of the cross appointment system”)
(URL: https://www.mext.go.jp/a_menu/kagaku/taiwa/1380912.htm)

d. Start time of research

In principle, the start time of research in research institutions for EYR is in 2021. However, those who can receive the support of Funds for the Development of Human Resources in Science and Technology (hereinafter, the ”Funds”) in FY2021 have to complete the negotiation among the parties, in principle, by the end of August 2021.

e. Points to be considered

- A company can set tenures, job titles/duties, etc. based on characteristics of the business for requirements in b. and c. above.
- Each research institution can make a public offering independently in parallel with presenting a post to this project, however, it should be careful not to decide employment

informally before the end of the application deadline (17:00, Thursday, June 10, 2021) for applicants (young researchers).

2. Requirements, etc. for applicants (young researchers)

Applicants (young researchers; hereinafter referred to as the "applicants"), who are going to be active in various research institutions of industry-academia-government, shall satisfy the following requirements. They must meet all these requirements at the time of application.

a. Attained academic degree, etc.

Those who satisfied all requirements in 1) through 4) below:

1) Those who have received a doctor's degree, or those who have acquired all the predetermined credit in graduate school doctoral programs for the standard term of study or more and completed the doctoral program without having a doctoral degree (referred to as "those who completed the doctoral program without receiving a doctoral degree")
2) As of April 1, 2022, those who are below 40 years of age (those below 43 years of age are accepted if they were enrolled in a medical field which requires clinical training)

   For those who have stopped research for a total of 3 months or more due to childbirth or childcare (regardless of sex), we will consider the age requirement by about 1 to 2 years according to individual circumstances.

   * In this case, enter the reason why research was suspended, due to childbirth or child-care, in the application form and submit it with an additional document certifying that reason. Please check "(vi) An interruption of research activities for more than 3 months for childbirth or childcare" in IV. 1.
3) Those who have research achievements (a doctoral dissertation can be added for a person who received a Ph. D.) in the past five years (since 2016).
4) Those who have never been selected as EYRs by MEXT

b. Nationality

Those who fall under any of the following:

1) Those who have Japanese nationality or foreigners who have obtained permission for permanent residence
2) Those who have nationality of countries which have diplomatic relations with Japan (Taiwanese or Palestinian researchers are treated in accordance with this.)

c. Points to be considered

- In principle, researchers who are selected as EYRs should carry out research at a laboratory other than the laboratory to which an EYR belongs to at the time of being a

doctoral course student (hereinafter referred to as “Alma Mater's Laboratory”) and the laboratory to which an EYR belongs at the time of application (hereinafter referred to as “Current Laboratory”). Because EYRs are required to set a research theme independently, carry out research as a laboratory director or a quasi director and challenge a new research task, using industry-academia-government research institutes all over Japan as their field.

- As described in 5. Negotiation among the parties below, each EYR candidate or applicant shall negotiate with the relevant research institution offering a post. In addition, after the EYR candidates are decided, MEXT or JSPS will send a list of the candidates as well as application information “Researcher Form 1” and “Researcher Form 1 Attachment” to all the research institutions which offered posts and the agencies supporting negotiation among the parties (see 5. (2)). Furthermore, their “first choice of institution type” are also provided to the agencies supporting negotiation among the parties. For this reason, it is necessary that applicants agree to the contents of the Application Guidelines including these matters on the application system when applying.

  Regarding those who have agreed at the application stage to provide application information to the institutions offering posts and the agencies supporting negotiation among the parties, their information will be provided to the research institution and the institution supporting negotiation among the parties following the application before the decision on EYR candidates. Applicants shall select whether or not to agree to it on the application system when applying.
- Among those who were selected as EYR candidates in the FY2019 applications and applied for the continuation of their candidate eligibility in FY2020, those whose negotiation among the parties with the research institution offering a post was not completed in FY2020 can continue their candidate eligibility through FY2021. If the EYR candidates applicable to the above have an intention of conducting negotiation among the parties with the research institution offering a post in FY2021, they can participate in the negotiation among the parties in FY2021 by applying for the continuation of their candidate eligibility. The said persons shall apply for the continuation of their candidate eligibility using the electronic application method described in IV. by the applicants’ deadline for applications (17:00, Thursday, June 10, 2021).
- Those who were selected as EYR candidates in the FY2020 applications and whose negotiation among the parties with the research institution offering a post was not completed in that fiscal year can continue their candidate eligibility through FY2022 at the longest. If the EYR candidates applicable to the above have an intention of conducting negotiation among the parties with the research institution offering a post in FY2021, they can participate in the negotiation among the parties in FY2021 by applying for the continuation of their candidate eligibility. The said persons shall apply

for the continuation of their candidate eligibility using the electronic application method described in IV. by the applicants' deadline for applications (17:00, Thursday, June 10, 2021).

Note that if application for the continuation is not submitted, it is not possible to participate in the negotiation among the parties in FY2022. Please apply by the application deadline if you wish to continue your candidate eligibility through FY2022. (Application for the continuation needs to be submitted each fiscal year. Please submit an application for the continuation through 2022 based on the Application Guidelines for FY2022.)

- Among those who satisfy the age requirement of the LEADER and wish to have a stable and independent research environment in a company, those who are recognized by MEXT to have acquired transferable skills, etc. (i.e., those who completed the Strategic Professional Development Program for Young Researchers, those experienced with Research Fellowship for Young Scientists PD and/or DC, and those who completed the WISE Program [Doctoral Program for World-leading Innovative & Smart Education]) shall be treated as those considered to have the research ability equivalent to that of those who continue their candidate eligibility. If such persons have participated in an internship in the post offered by a company for the LEADER and completed the negotiation among the parties, they shall be treated as being eligible in the same manner as those who continue their EYR candidate eligibility.

3. Publication of posts

Research institutions offer post(s) based on an application form to MEXT. MEXT checks the post(s), from the viewpoint of conformance with requirements shown in 1. above, lists posts that meet requirements and publicize the list through MEXT's website or JSPS's website.

Further detailed information regarding the post(s) in both Japanese and English in principle shall be registered on JREC-IN Portal (https://jrecin.jst.go.jp/seek/SeekTop) operated by the Japan Science and Technology Agency (JST) or disclosed on websites of research institutions. When doing so, research institutions are asked to pay sufficient attention not to cause a discrepancy between the contents stated in the application form (Research Institution Form 2) and the information posted on JREC-IN Portal or on the website of the research institution. In addition, we recommend research institutions to actively utilize the JREC-IN Portal, as it would help call attention of researchers even more to the posts.

The primary deadline for offering post(s) is Monday, May 17, 2021. MEXT will confirm the requirements of the offered posts, which will then be published in late May. Subsequently, posts will be additionally published as necessary.

The period for offering posts shall be up to Monday, December 13, 2021. Post offer is accepted on an as-necessary basis. Furthermore, as described also in 5. below, take care to ensure a fair and highly transparent selection process.

- Date of post publication: late May 2021 (posts to be offered as required)

- Primary deadline of post offer: 17:00, Monday, May 17, 2021

Last deadline: 17:00, Monday, December 13, 2021
(The research institution offering a post may amend post information up to the end of December 2021.)

4. Selection of excellent young researcher (EYR) candidates

A review is carried out to select EYR candidates by the EYR Selection Committee (hereinafter, the "Selection Committee") established within the Japan Society for the Promotion of Science. A review is conducted by the Selection Committee members through screening of the application documents (especially, Researcher Form 1 (including the Attachment) and 2), submitted by the applicants. (Please see "2021 Review Guidelines for Leading Initiative for Excellent Young Researchers (LEADER)" for detailed review method.)

Based on review results by the Selection Committee, MEXT determines candidates and notifies them using the electronic application method installed and managed by JSPS.

5. Negotiations among the parties

(1) Negotiation among the parties

In this project, each research institution offering a post needs to negotiate on employment individually with the EYR candidates or applicants. In the negotiation among the parties, the EYR candidate or applicant may contact and visit the research institution, or the institution may check the application information and contact the EYR candidate or applicant.

For smooth negotiation among the parties, each research institution registers information such as the necessity of advance notice for each post and the outline of selection process and schedule when offering posts to MEXT. After publishing the post offers, it is also possible to update information on the selection process schedule, etc. of each research institution.

Research institutions shall use a fair and highly transparent selection process so as to avoid situations that go against the selection process and schedule indicated in the published post information (including the information posted on JREC-IN Portal and the

website of each institution), such as informally deciding on employment before closing contact from candidates and applicants and denying the requests of candidates and applicants. In addition, in order to avoid situations that cause disadvantage to applicants from abroad in the negotiation among the parties, we recommend research institutions to accept applications and conduct interviews online by utilizing methods such as e-mail or "Web application function" of JREC-IN Portal for submitting application documents and a video conference system or video call tool for conducting interviews.

Applicants may be requested from research institutions to submit documents other than the application documents for this project, so please check the post information.

Regardless of the timing of negotiation among the parties and the time when each research institution can start advance notice, the funds delivery destination will be decided after the decision of EYR.

(2) Agencies supporting negotiation among the parties

In FY2021, we plan to introduce support for the negotiation among the parties that is provided by the agencies supporting negotiation among the parties (hereinafter, the "Bridge Promoters") so as to promote the unearthing of talented young researchers who can succeed at research institutions run by industry, academia, and government and to facilitate smoother negotiations. Support for the negotiation among the parties is provided by institutions serving as Bridge Promoters with which MEXT signed an outsourcing contract. Details of the support for the negotiation among the parties will be provided at a later date.

(3) Advance notice in negotiation among the parties

It is possible to start negotiation among the parties before the EYR candidates are decided for posts indicating the necessity of advance notice, as far as it is after the publication of the post offers. In this case, researchers need to contact the relevant research institution by the deadline set for each post.

(Points to note in advance notice)

- If a research institution contacts researchers and carries out screening before the determination of EYR candidates, the research institution is required to indicate the necessity of advance contact in the post information it publishes and clearly state the method of contact.
- Each research institution should be careful not to decide employment informally before the end of the application deadline (Thursday, June 10, 2021).
- It is possible to change from a post requiring advance notice to a post not requiring advance notice. (However, it is not possible to change a post from that of optional to a post requiring advance notice, because it might be disadvantageous to the applicant.)

(4) Provision of EYR candidate list and application information to research institutions

For smooth negotiation among the parties, after the candidates are determined, the list of EYR candidates as well as application information “Researcher Form 1” and “Form 1 Attachment” will be sent to all research institutions which offered posts. Further, once application is made, application information of those who have agreed to provide such information to institutions that offered posts at the stage of application as well as of those who continue the candidate eligibility is provided to the research institutions before the determination of EYR candidates.

(5) Provision of EYR candidate list and application information to agencies supporting negotiation among the parties

In order to promote the support for the negotiation among the parties between research institutions and EYR candidates or applicants, application information of applicants and EYR candidates who have given consent (“Researcher Form 1,” “Researcher Form 1 Attachment,” and their first choice of institution type) is provided to the Bridge Promoters.

6. Determination of EYR and scheduled number of EYRs

(1) Determination of EYR

If the negotiation among the parties is completed by the end of August 2021 between the research institution offering a post and an EYR candidate or applicant and the employment starts in FY2021, MEXT will determine the candidate as an EYR for FY2021.

In addition, as for the posts publicized in FY2021, candidates whose negotiation completed from September 2021 through the end of March 2022 and candidates whose hiring starts in FY2022 as a result of the negotiation are to be determined as EYRs and they may be eligible for funding support.

In principle, those who are selected as EYRs should carry out research at a laboratory other than the Alma Mater's Laboratory and the Current Laboratory except for the unavoidable reasons stated below.

(Unavoidable grounds)

- It is difficult for the EYR to be engaged in researches in a laboratory other than the Alma Mater's Laboratory and the Current Laboratory due to a physical challenge, childbirth/childcare, etc.
- Purposes/contents and plans of researches make it extremely difficult to change a research laboratory to the one other than the Alma Mater's Laboratory and the Current Laboratory in the current status of researches of research institutions in Japan.

In cases where a company offering a post on JREC-IN Portal from FY2021 (although

not offering a post in the LEADER) hires a new applicant or a person who continues his/her candidate eligibility, the post shall be treated as being equivalent to the post offered by the LEADER only if MEXT judges that the post satisfies the post requirement for the LEADER. Please note that a company hiring a new applicant or a person who continues his/her candidate eligibility and wishing for determination as an EYR needs to contact MEXT and ask for confirmation of whether the subject post satisfies the requirements for posts in the LEADER. In addition, if the hiring company wishes funding support, an application for the support needs to be submitted separately.

(2) Continuation of eligibility for excellent young researcher candidate

The candidates newly selected in FY2021, whose negotiation among the parties did not complete within the fiscal year, may continue their candidate eligibility through FY2023 by applying for the continuation in the next fiscal year onwards. They may conduct the negotiation among the parties with research institutions that offer posts newly published in FY2022 and 2023 without going through the review.

If the negotiation among the parties is completed within FY2022 and the candidate is determined as EYR, the person cannot apply for the continuation of the candidate eligibility for the following fiscal year. In addition, it should be noted that in order to apply for the continuation of the candidate eligibility through FY2023, the candidate is required to apply for the continuation in FY2022.

*Among those who were selected as EYR candidates in FY2020 and whose negotiation among the parties was not completed during the fiscal year, those who applied for the continuation of their candidate eligibility in FY2021 but whose negotiation among the parties is also not completed in FY2021 may continue their candidate eligibility through FY2022 by applying for the continuation again.

(3) The scheduled number of excellent young researchers (EYRs)

In FY2021, approximately 20 persons are planned to be newly selected as EYRs.

Note that the scheduled number of EYRs is the number of persons to be supported by the Funds and includes those who continue their candidate eligibility as in 2. c. above and have completed the negotiation among the parties. In addition, if no funding support is desired, or if the determination as an EYR is desired despite being ineligible for support with Funds, such candidate may be selected as an EYR even in excess of the scheduled number of EYRs.

*The term “have completed the negotiation among the parties” refers to the time of receipt of a negotiation completion report by MEXT.

7. Contents of support

(1) Expenses to be subsidized

In this project, JSPS will grant either [A] or [B] below as Funds to the research institutions that hire young researchers decided as EYRs and seek support.

Please be aware that if the number of EYRs who completed negotiation among parties with research institutions exceed the scheduled number of EYRs described in 6. (3) above, we may not be able to pay the amount of the Funds each research institutions has applied for (including the amount after FY2022).

As a matter of principle, the types of available expenses are those shown in Appended Tables 1, 2, and 3.

To eliminate the excessive concentration of support in any particular research institution, the upper limit of the total Funds concerning EYR, which starts the support in FY2021, is set at 100 million yen per research institution.

[A] Research expenditures and costs of building research environment

The following a and b are granted as the Funds for young researchers appointed as EYRs to carry out research in a stable and independent manner.

a. Research expenditures for EYRs

For the first 1–2 fiscal years after determination of EYRs (or 2–3 fiscal years if hiring starts in the following fiscal year and EYRs become eligible for support by Funds), up to 12 million yen per EYR is provided during the two years to support research expenditures required to start the research activity. The two-years worth of Funds may be allocated freely, but there is an upper limit of 8 million yen per year. In addition, as for humanities and social sciences, the upper limit of the support shall be 8 million yen for the two years, with an annual upper limit of 5 million yen.

b. Costs of building research environment

To build a system that enables EYRs and other young researchers (excluding students) to carry out research in a stable and independent manner, the amount calculated by multiplying 2 million yen by the number of EYRs belonging to a research institution (in the first fiscal year, the number of EYRs selected in that fiscal year) is provided at maximum to support costs of building research environment in the first through fifth fiscal years after the determination of the EYRs (for example, salaries for adjunct instructors substituting lectures to secure research time of research assistants and EYRs, gratuities for mentors, and expenses required to purchase/repair shared research equipment, etc., and to hold a meeting to evaluate EYRs).

The upper limit of the support may be raised or additional support may be provided limited to the first and second fiscal years after the appointment of EYRs, if the following conditions are met.

1) A research institute which hires an EYR who belonged to a research institution

outside Japan for the past year or longer as of the application deadline (Thursday, June 10, 2021. The same date as for those who are applying for continuation of the candidate eligibility) will be provided up to 3 million yen.

2) If an EYR is hired in cross appointment between different types of institutions such as between a company and a university, funds up to 4 million yen shall be provided.

3) If a research institution that decide to hire an EYR in FY2021 hires a young researcher (including those other than applicants) for the post published in FY2021 who is not a candidate and satisfies the requirements of 2. a. and b. above, and if the research institution is not the institution to which the researcher belonged to for his/her doctoral course or just before the employment, additional support will be granted up to the amount that is obtained by multiplying 1 million yen by the smaller of "the number of such young researchers that belong to the institution in each fiscal year" or "the number of EYRs that are hired in FY2021 and belong to the institution in each fiscal year (in the first fiscal year, the number of EYRs selected in that fiscal year)" for the first 1–2 fiscal years after determination of the said young researcher. As a rule, the additional support in this requirement will be provided if the requirement is met as of the end of August depending on the budget implementation at that time.

Table of the amounts of support for costs of building research environment
(All figures are per person.)

	First and second fiscal year	Third to Fifth fiscal year
EYR (excluding 1) and 2))	2 million yen	
Hiring from an institute outside Japan 1)	3 million yen	2 million yen
Hiring using the cross appointment system 2)	4 million yen	2 million yen
Hiring of young researcher 3)	1 million yen	-

When an EYR and young researcher in the above 3) transfer from the concerned posts, the support as described above will not be provided from the following fiscal year to the original research institution or the transfer destination. However, when an EYR transfers to a newly published post in and after FY2022, the above-mentioned support may be continued for the transfer destination research institute from the following fiscal year.

In addition, research expenditures for EYRs cannot be diverted to costs of building research environment. Costs of building research environment may be diverted to research expenditures for EYRs, but the upper limit per annum of research expenditures for EYR shall be 8 million yen. As for humanities and social sciences, no diversion is acceptable in excess of 5 million yen per year. In addition, research expenditures for EYRs and costs of building research environment cannot be put together and used.

[B] Industry-academia collaboration activity expenditures ***Available only for companies**

Funds will be offered for industry-academia collaboration activity expenditures to create stable and independent research environment at a company for the researchers appointed as Excellent Young Researcher when they are participating in joint or delegated research (hereinafter, the "joint research, etc.") with a university, Inter-University Research Institute Corporation, colleges of technology, and National Research and Development Agency (hereinafter, the "universities, etc.").

When an EYR participates in a joint research, etc. with a university, etc., as much as a half of the industry-academia collaboration activity expenditures shouldered by a company based on the contract regarding the joint research, etc., with the upper limit of 10 million yen per fiscal year, will be provided for the first through fifth fiscal years following the appointment as an EYR. (e.g. if an EYR participates in a joint research with a university and a contract was signed where the company shoulders 5 million yen, 2.5 million yen will be provided as industry-academia collaboration activity expenditures.)

If the joint research, etc. starts in the second fiscal year of the appointment of EYR, the support for the costs of building research environment of 2 million yen in the above [A] b. alone will be provided in the first fiscal year.

*Whether the post offered by the company falls under funds [A] or [B], as a rule, is specified in the entry item (Research Institution Form 2) of the post information at the time when the post is published.

If the EYR transfers from the concerned post, the above support will not be provided from the following fiscal year. However, when an EYR transfers to a newly published post in and after FY2022, the above-mentioned support may be continued for the transfer destination research institute from the following fiscal year.

Note that the expenditures cannot be diverted together with the research expenditures for EYRs and costs of building research environment described in [A]. In addition, in the same manner, the expenditures cannot be put together and used with research expenditures for EYRs and costs of building research environment.

(2) Exclusion of redundant support

Please note that this project cannot offer support including research expenditures for the same researcher if a research institution gets a support from other Funds for the Development of Human Resources in Science and Technology projects (such as strategic development project for researchers who can succeed worldwide).

8. Schedule from application to provision of the funds

(1) Research institutions

May 17, 2021: Primary deadline of post offer [see II.3.]

Late May: Publication of posts (subsequently, posts will be published as necessary) [see II.3.]

After the publication of posts: Start of negotiation among the parties [see II.5.]

*After the publication of posts, it is possible that each research institution, applicants, and those who continue the candidate eligibility provide an advance notice and conduct negotiation among the parties before EYR candidates are decided.

Mid-June: Delivery of application information and information on those who continue the candidate eligibility [see II.5.(4).]

*Mid-October: Delivery of an EYR candidate list [see II.5.(4).]

At any time after completion of negotiation among the parties: Submission of a negotiation completion report [see III.2.]

*If the number of those who have completed negotiation among the parties exceeds the scheduled number of EYRs for FY2021, namely 20 persons, EYRs will be determined in the order of completion of negotiation among the parties (i.e., the order of receipt of a negotiation completion report by MEXT).

August 31: Submission deadline for a negotiation completion report [see III.2]

October: Start of research activities as an EYR

*In order to start research as an EYR, it is required that the person is determined as an EYR.

(2) Applicants (Young researchers)

From late May: Publication of post offers [see II.3.]

May 10: Start of application [see IV.1.]

June 10: Application deadline [see IV.1.]

After the publication of posts: Start of negotiation among the parties [see II.5.]

*After the publication of posts, it is possible that each research institution, applicants, and those who continue the candidate eligibility provide an advance notice and conduct negotiation among the parties before EYR candidates are decided. Researchers need to contact the relevant research institution by the application deadline set for each post.

September: Review for EYR candidate selection [see II.4.]

October: Notification of acceptance or rejection as an EYR candidate [see IV.2.]

October: Determination of EYRs based on the review results

October: Start of research activities as an EYR

III. Procedure, etc. for Research Institutions

1. Preparation of application documents, application method, etc.

Follow the electronic application method installed and managed by JSPS to apply for this project. For more details, please refer to “The public information (for research institutions)” in “Leading Initiative for Excellent Young Researchers (LEADER)” on the JSPS website.

URL: https://www.jsps.go.jp/j-le/koubo_kenkyu_kikan.html

(i) Application documents

Follow the electronic application method to fill in necessary information in the attached application forms (Research Institution Forms 1 and 2) and submit them.

"Research Institution Form 1" is the form to enter the basic information of the research institution. Please create once as institution as a whole. “Research institution Form 2” is a form to enter detailed information on posts which should be created for each post to be presented.

* A research institution wishing to receive funds needs to submit a “Taisei Seibi nado Jiko Hyoka Checklist (Self-Evaluation Checklist on System Development, etc.)” based on “Guidelines for Managing and Auditing Public Research Funds at Research Institutions (Implementation Standard)” and “Checklist on implementation status based on the ‘Guidelines for Responding to Misconduct in Research’,” as well as this application document to MEXT. (See V. (3) and (7) for details.)

(ii) Application period

Start of application: from Friday, April 30, 2021

Primary deadline of post offer: 17:00, Monday, May 17, 2021

Last deadline: 17:00, Monday, December 13, 2021

(The posts offered by Monday, May 17, 2021 are published in late May (tentative), and subsequently, posts will be published as necessary. Start date of application may be changed.)

(iii) Submission method

To use the electronic application method, first go through the “ID and password issuance application” process from the JSPS website, then log in to the electronic application system using the obtained ID and password, prepare application forms, and submit them. Details on obtaining an ID and password and preparing application

forms will be posted on the JSPS website, so please refer to it.

(iv) Others

- Among the posts offered by research institutions, the posts that satisfy requirements in II. 1 above will be listed up and publicized through the websites of MEXT or JSPS.
- Items described in the "Research Institution Form 2" shall be publicized on the JST's JREC-IN Portal (https://jrecin.jst.go.jp/seek/SeekTop) or the research institution's website, immediately after publicizing the posts as shown above. For registering in JREC-IN Portal, input items according to Reference 2. When doing so, research institutions are asked to pay sufficient attention not to cause a discrepancy between the contents stated in the application form (Research Institution Form 2) and the information posted on JREC-IN Portal or on the website of the research institution.
- Information of those who agreed to provide the information to institutions that offered posts when applying will be provided before the decision on EYR candidates.

2. Reporting of completion of negotiation among the parties

If the negotiation among the parties is completed between the research institution offering a post and an EYR candidate or applicant, the institution shall submit the required documents as follows. Submission is possible even before the EYR review of the applicant. Once the negotiation is completed, please submit the documents as necessary.

(i) Documents to be submitted

Please fill in the necessary information in the negotiation completion report (Research Institution Form 3) and submit it. Upon determination as an EYR, also submit a copy of the letter of consent (Research Institution Form 4) from the person to be hired (the original to be stored by each institution) and the written pledge (Research Institution Form 5).

Also, if the case falls under the following, submit a relevant confirmation document together with the negotiation completion report.

	Confirmation documents
I. When hiring a person who belonged to a research institution outside Japan for the past one year or longer	Research Institution Form 6
II. When hiring a person in cross appointment between different types of institutions	A document that confirms hiring using the cross appointment system
III. When an institute which decided to hire an EYR is hiring a young researcher other than the EYR candidates to the post it offers in FY2021	Research Institution Form 7

*Please confirm the [conditions] in Research Institution Form 3 for details.

If the person whom the research institution was going to hire declined the appointment after the institution submitted the negotiation completion report, obtain the letter of decline (Research Institution Form 8) from the person and swiftly submit a copy (the original to be stored by each institution).

In this case, the person who voluntarily declined the hiring to the concerned post is also considered to have declined from being an EYR and thereafter cannot become an EYR even if the person completes the negotiation among the parties for another publicized post in this project.

(ii) Submission period

Until 17:00, Tuesday, August 31, 2021 (*strict observance of the deadline)

* In the event of an excess in the scheduled number of EYRs for FY2021 (around 20 persons), EYRs are decided in the order of receipt of a negotiation completion report by MEXT. Therefore, it is recommended to submit a report promptly after the end of the negotiation among the parties, without waiting for the submission deadline and the completion of negotiations among the parties for another post if multiple posts are offered.
* Each time when the negotiation is completed between the research institution and an EYR candidate in the period from September 2021 through the end of March 2022, please fill out the necessary information in the document (Research Institution Form 3) and submit it. In this case, fund assistance may be implemented from FY2021 or the second fiscal year from FY2022 depending on budget adjustments.

(iii) Submission method

Submit documents by e-mail after converting into PDF file. If it is difficult to submit the documents via e-mail, please consult with MEXT.

- The e-mail subject line shall be “[Completion of negotiation among the parties] Institution Name.”

- Add an “institution name” to an attached file name and send the file.
- After receiving an e-mail, make a receipt notification by e-mail to a sender within the next day (excluding Saturday, Sunday, and holidays). Immediately let us know if no receipt notification reaches in one or two days after sending an e-mail.

(iv) Submit to

3-2-2, Kasumigaseki, Chiyoda-ku, Tokyo, 100-8959
Basic Human Resources Promotion Section 1, Human Resources Policy Promotion Office, Human Resources Policy Division, Science and Technology Policy Bureau, MEXT

E-Mail: takuetsu@mext.go.jp

3. Application for funding support

(1) The research institution that has determined to accept an EYR candidate after the selection and the negotiation among the parties and wishes to receive funding support (hereinafter, the “Support Institution”) shall prepare an annual plan based on support application documents (from both the researcher and the research institution) and the negotiation completion report as well as the integration of expenses responding to the plan and submit them to JSPS. We will contact you about details at a later date.
(2) The Funds are granted based on the Funds payment guidelines, etc. specified separately.

4. Survey and questionnaire survey

To promote the science and technology innovative human resources development in Japan and improve the Leading Initiative for Excellent Young Researchers (LEADER), MEXT or JSPS will survey institutions that hired EYRs on the research activity status of each EYR in the year when the EYR is determined and for approximately the subsequent 10 years. Your cooperation is appreciated. We also plan to conduct a survey for research institutions applying for this project, so we ask for your continued cooperation.

IV. Procedure, etc. for Applicants (Young Researchers)

1. Preparation of application documents, application method, etc.

Follow the electronic application method installed and managed by JSPS to apply for this project. Please refer to “The public information (for researchers) in “Leading Initiative for Excellent Young Researchers (LEADER)” on the JSPS website for any details.

URL: https://www.jsps.go.jp/j-le/koubo_kenkyu.html

(i) Application documents

Follow the electronic application method to fill in the attached application forms (Researcher Form 1 (including the Attachment) and Researcher Form 2) or to download the prescribed forms and submit them.

a. Researcher Form 1 (including attachment)

Please input necessary information using the electronic application system and submit it. For attached Form 1, please download the prescribed form, fill in the form and register it in the electronic application system.

b. Researcher Form 2

Please download the prescribed form, prepare and register it by the electronic system.

*Regarding those who were determined to be EYR candidates for FY2019 and continued their candidate eligibility through FY2020, and those who were determined to be EYR candidates for FY2020 and are applying for the continuation of the candidate eligibility through FY2021

In applying for the continuation of the candidate eligibility, the contents of "Researcher Form 1" and "Researcher Form 1 Attachment" that were already registered in the previous year need to be checked and updated on the electronic application system. It is not necessary to register "Researcher Form 2" because the information already registered in the previous fiscal year cannot be changed. Fill in the respective application forms on the electronic system or download and prepare the prescribed forms and register them.

(ii) Application period

From 10:00 a.m., Monday, May 10, 2021 to 5:00 p.m., Thursday, June 10, 2021 (strict observance of time limits)

Note that start date of application may be changed.

(iii) Submission method/submit to

To use the electronic application system, log in to the system installed and managed by JSPS using the acquired ID / password after applying "ID / password issuance application," and prepare application forms and submit them. Details on obtaining ID / password and preparing an application form will be posted on the JSPS website, so please refer to it.

When applying for continuation of the candidate eligibility, please do not obtain a new ID to use the system; log in with the ID given at the time of determination as an EYR candidate. If applied with a newly-obtained ID, the application will be

considered as a new application for FY2021 and the candidate eligibility cannot be continued. See the JSPS website for details.

(iv) Notes for application documents and selection

If any content misstatement is found in an application document, the determination of an EYR may be canceled and support discontinued.

(v) Others

- The load on the application system is large just before the due date. A problem may occur: for example, it takes time to send an application, or the application cannot be completed. So, please complete the application well in advance to avoid any problems.
- The application procedure is complete when all of (i) a and b are in place on the electronic application system.
- Part of the information stated in application documents (Researcher Form 1 and Researcher Form 1 Attachment) are disclosed to all research institutions which offered posts if the researcher is selected as an EYR candidate.
- Regarding those who have agreed to provide application information to institutions offering posts at the application stage, their information will be provided to the institution following the application before the decision on EYR candidates. Applicants shall select whether to agree to provide the application information or not on the application system when applying.
- We may request a person determined as an EYR candidate to submit an identity paper (a copy of a driver's license etc.) and other documents that can confirm the receiving of an academic degree such as a copy of diploma etc. at a later date. We will contact you about any details at a later date.
- The application documents for this project must be prepared in either Japanese or English.
- It is possible to prepare the application documents in color and insert images and tables, but the copies of the documents are prepared in black and white when reviewing, so the contents should be legible in black and white. In addition, please note that the maximum file size of Form 1 Attachment is 1 MB and Form 2 is 3 MB.
- It is possible to change the number of words and lines in Researcher Form 1 Attachment and Researcher Form 2, but you cannot change the layout, especially column width and the order of entry items, or delete the explanation boxes for the items.
- Replacement or correction of the application documents is not acceptable. Please carefully check that there is no deficiency in the documents before submitting them. Even if the content at the time of application has changed after the

determination as an EYR candidate, the application documents can't be replaced.

(vi) An interruption of research activities for more than 3 months for childbirth or childcare

Based on the application requirement a. 2) described in II. 2 above, if you apply as a person who took time out your research activities for the reason of childbirth or childcare, write the reason of interruption in the "Researcher Form 1" when applying through an electronic method and send the documents below certifying the grounds for childbirth / childcare by mail. (As of April 1, 2022, those who are below 40 years old [or below 43 years old for those who were enrolled in medical field which requires clinical training] are not required to submit this documentation. If you reside outside Japan and cannot mail documents, consult with JSPS.)

<Documents to be submitted>

Please submit the original certificate of resident card (without the "My Number") or a family register (or extract of family register), (the certificate documents stating names and birth dates of the applicant and his/her child).

In addition, if you cannot confirm the reasons for childbirth / childcare by the resident card or family register (or extract), you may additionally be asked to submit documents such as medical certificate.

<Addressee>

5-3-1, Koji-machi, Chiyoda-ku, Tokyo, 102-0083

Excellent Young Researchers Section 1, Research Fellowship Division, Japan Society for the Promotion of Science

*Sending by mail, write "LEADER application documents enclosed" on the envelope in red.

*In principle, we will not consider delivery delays or loss, therefore, send the documents by a confirmed method, such as registered mail. Please note that we cannot respond to inquiries about the arrival of documents.

<Deadline>

17:00, Thursday, June 17, 2021 (Japan Time)

As for the details on preparing the "Researcher Form1" when applying through the electronic application system, they will be posted on the JSPS website, so please refer to it.

If an error is found in the application contents and the age requirement stated in II. 2. a. 2) above is not satisfied, the determination may be canceled, even after the determination as an EYR.

2. Selection of excellent young researcher (EYR) candidates and disclosure of the results

A document-based review is carried out to select EYR candidates (hereinafter, the "Candidates") by the EYR Selection Committee (hereinafter, the "Selection Committee") established within the Japan Society for the Promotion of Science. (Please see "2021 Review Guidelines for Leading Initiative for Excellent Young Researchers (LEADER)" for detailed review method.)

Based on the results of the review by the committee members at the Selection Committee, MEXT finalizes the EYR candidates and notify them via the electronic application system in October (tentative).

If a candidate declines to become an EYR candidate and has no intention of participating in the negotiation among the parties, he or she needs to notify the intention to decline from being a candidate to MEXT using the Declination by the Excellent Young Researcher Candidate (Researcher Form 3) by sending it to the address described in III. 2. (iv) by mail.

3. Survey and questionnaire survey

To promote the science and technology innovative human resources development in Japan and improve the Leading Initiative for Excellent Young Researchers (LEADER), MEXT or JSPS will survey the EYR himself/herself on his/her research activity status in the year when the EYR is determined and for approximately the subsequent 10 years. Your cooperation is appreciated. We also plan to conduct a survey for researchers applying for this project, so we ask for your continued cooperation.

V. Points to be considered

The Support Institution and the EYR hired by the institution should pay attention to the following matters (1) through (17). In addition, the other research institutions and other applicants should pay attention to the following matters (15) through (17).

(1) Execution and management of the project

Proper accounting management should be conducted for these Funds according to the "Act on Regulation of Execution of Budget Pertaining to Subsidies, etc.," the "Order of the Act on Regulation of Execution of Budget Pertaining to Subsidies, etc.," and "Guidelines on Funds for the Development of Human Resources in Science and Technology (Leading Initiative for Excellent Young Researchers)" stipulated by JSPS, etc.

Clearly separate the accountings of the Funds from the others, prepare reports showing details of the income and expenditure, organize documentary evidence on income and

expenditure, and save these reports and documents for five years from the fiscal year after the one in which the entire concerned project is completed.

Furthermore, any purchase of equipment and fixtures, etc., shall be managed under due care of a prudent manager within the support period and subsequently. Funds shall be managed efficiently according to the purpose of Funds.

(2) Improvement of the system according to "Guidelines for the Management and Audit of Public Research Funds In Research Institutions (practice standards)"

In applying for this project and carrying out research, etc., research institutions need to comply with details of "Guidelines for the Management and Audit of Public Research Funds In Research Institutions (practice standards)" (revised in Feb. 18, 2014)*.

Research institutions shall strive to develop a management/auditing system for research expenditures under their responsibilities and execute proper research expenditures in accordance with the marking guideline.

If results of investigation into the system development status based on the marking guideline lead MEXT to find deficiency of the system development, etc. of a research institution, we may take measures against the institution to reduce indirect expenses of all competitive funds allotted by MEXT and independent administrative corporations under the jurisdiction of MEXT.

* Please refer to the following website for "Guidelines for the Management and Audit of Public Research Funds In Research Institutions (practice standards),"
[URL] https://www.mext.go.jp/a_menu/kansa/houkoku/1343904.htm

(3) Submission of a "Taisei Seibi nado Jiko Hyoka Checklist (Self-Evaluation Checklist on System Development, etc.)" based on "Guidelines for the Management and Audit of Public Research Funds In Research Institutions (practice standards)"

To apply for this project, research institutions need to submit "Taisei Seibi nado Jiko Hyoka Checklist (Self-Evaluation Checklist on System Development, etc.)" (hereinafter, the "Checklist"), which is a report stating developments of management/audit of research funds and the corresponding status based on the guideline. (An application without submitting the checklist is not accepted.)

Therefore, research institutions need to submit the Checklist to Office of Research Funding Administration, Promotion Policy Division, Research Promotion Bureau, MEXT by the time they offer the posts, based on the form in the following website by using the Cross-ministerial Research and Development Management System (e-Rad). However, if it has already submitted the checklist on a separate occasion since April 2020, the institution does not have to submit a new one this time. Also, institutions that do not receive Funds from JSPS do not need to submit it. Please check the following MEXT website for details of the submission method for the Checklist.

Research institutions are asked to pay due attention as even if a research institute has

publicized its posts, the published posts may be taken down and the institution may not be allowed to participate in the initiative if submission of the Checklist cannot be confirmed.

Furthermore, as the marking guideline includes the viewpoints of the "promotion of information transmission/sharing," please show this checklist on the research institution's website, etc., and actively transmit information.

[URL] https://www.mext.go.jp/a_menu/kansa/houkoku/1301688.htm

*Note: Please note that the checklist can only be submitted via e-Rad. Please exercise great caution because it usually takes about two weeks for registration. As for the detailed procedures concerning e-Rad use, check the following website.

[URL] https://www.e-rad.go.jp/organ/index.html

(4) Responses to the illegal use and receipt

The following strict measures are taken against the illegal use and receipt of research funds on this project (hereinafter, the "Illegal Use, etc.").

- Measures for the cases where the Illegal Use, etc. is detected

(i) Measures to cancel agreements, etc.

Cancel/change the decision to grant Funds to a task where the Illegal Use, etc. is detected, and ask for the return of all or part of Funds. In addition, the grant of Funds in and after the next year may not be determined.

(ii) Measures to restrict applications and participation[*1], etc.

As shown in the following table, we will give a serious warning or take measures to restrict application to or participation in this project as well as projects of all competitive funds, bounties, and commissions, etc. granted by JSPS, according to the extent of misconduct, if a researcher has improperly used the research expenditures of this project (including researchers involved in the conspiracy; [hereinafter, the "Researcher who Has Made the Improper Use, etc."]) or if the researcher who was not found to be involved in the improper use failed to fulfil his/her duty of care[*2].

In addition, the outline of the Illegal Use, etc. of a staff responsible for other competitive funds including other ministers and incorporated administrative agencies of other ministers (a name of a researcher who made the Illegal Use, etc., project name, institution that he/she belongs to, research tasks, budget, research year, details of illegal action, etc., and details of implemented measures) may be provided.

*1 "Applications and participation" means a suggestion of and an application for a new task, and new participation in research as a joint researcher, a research task in process (ongoing task) as a principal investigator or a joint researcher.

*2 The "researcher who failed his/her duty to be a good administrator" is a researcher whose Illegal Use, etc. is not recognized but who failed his/her duty to be a good administrator.

<table>
<tr><td>Those subject to measures</td><td colspan="2">Extent of illegal use</td><td>Period of grant suspension</td></tr>
<tr><td>I. Researchers who have made the Illegal Use, etc., and those who have conspired the Illegal Use, etc.;</td><td colspan="2">1. Spend Funds for private purposes for their own benefit</td><td>10 years</td></tr>
<tr><td rowspan="3">II. Researchers who have made the Illegal Use, etc., and those who have conspired the Illegal Use, etc.;</td><td rowspan="3">2.
Other than 1.</td><td>1) It is judged that the influence on the society is large and that the maliciousness of conduct is high.</td><td>5 years</td></tr>
<tr><td>2) Other than 1) and 3)</td><td>2-4 years</td></tr>
<tr><td>3) It is judged that the influence on the society is small and that the maliciousness of conduct is low.</td><td>1 year</td></tr>
<tr><td>III. A researcher who received research grants through deception or other improper means, and a conspiratorial researcher</td><td colspan="2">—</td><td>5 years</td></tr>
<tr><td>IV. A researcher who was not directly involved in the Illegal Use but failed in his/her duty to be a good administrator and spend Funds</td><td colspan="2">—</td><td>The upper limit is 2 years, the lower 1 reflecting severity of delinquency of the researchers who failed in their duty to be a good administrator</td></tr>
</table>

A serious warning will be issued to those who are deemed as falling under the following cases.

(1) Among the cases falling under II above, ones that are judged to have minor impact on the society, the maliciousness of conduct is low, and the illegally used amount is small.

(2) Among the cases falling under IV above, ones that are judged to have minor impact on the society and the maliciousness of conduct is low.

(Source: Japan Society for the Promotion of Science Regulations No. 19 Regulations on Responding to Misconduct in Research and Misuse of Research Funds Attached Table 2 [Article 16 1-4 Misuse relations])

(iii) Release of false cases

As a rule, MEXT and JSPS publicizes illegal cases (project name, overview of the illegal case (project name, institution that a researcher belongs to, research year, details of illegal actions, and details of implemented measures) of researchers whose application and participation are restricted due to the Illegal Use, etc. and who failed their duty to be a good administrator.

Furthermore, in "Guidelines for the Management and Audit of Public Research Funds In Research Institutions (practice standards)," as it stipulates that a research institution should promptly publicize investigation results if the investigation finds any illegal action, thus, research institutions shall need to cope with it in accordance with the guidelines.

[URL] https://www.mext.go.jp/a_menu/kansa/houkoku/1364929.htm

(5) Measures against researchers whose application and participation are restricted in the competitive fund system and other support projects for the Development of Human Resources in Science and Technology, etc.

Suppose due to irregular use of research funds, researchers are restricted in competitive fund systems* or other support projects for the Development of Human Resources in Science and Technology provided by the government or incorporated agencies or projects for which JSPS grants research funds. Their applications and participation are also restricted in this project during the period when their applicant eligibility in such system and projects is restricted.

The competitive fund system and other support projects for the Development of Human Resources in Science and Technology include the system which starts new public offering in and after 2021. Furthermore, systems completed in or before 2020 are also included.

* Please see the following website for the systems to be currently targeted.

[URL] https://www8.cao.go.jp/cstp/compefund/(competitive fund system)

The suggestion solicitation type research fund system is to be publicized soon.

(6) Development of the system based on "Guidelines for Responding to Misconduct in Research"

Research institutions are required to comply with the "Guidelines for Responding to

Misconduct in Research" (Adapted on August 26, 2014 by the Minister of MEXT; hereinafter, the "Guideline")* in applying for this project and implementing research activities.

If MEXT finds deficiencies such as underdevelopment of the system and regulations, and non-execution of research ethics education in the guided investigation of the system development status, MEXT may take measures against the relevant institutions to reduce indirect expenses of all competitive funds allotted by MEXT and independent administrative corporations under the jurisdiction of MEXT.

* Please refer to the following MEXT website for "Guidelines for Responding to Misconduct in Research."

[URL] https://www.mext.go.jp/b_menu/houdou/26/08/1351568.htm

(7) Submission of checklist regarding initiatives based on "Guidelines for Responding to Misconduct in Research"

To apply for this project, each research institution is required to submit a checklist about efforts based on "Guidelines for Responding to Misconduct in Research" (hereinafter, the "Checklist of misconduct in research activities"). (An application without submitting this checklist of misconduct is not accepted.)

Therefore, research institutions need to submit the checklist of misconduct in research activities to the Office of Research Fairness Promotion, Human Resources Policy Division, Science and Technology Policy Bureau, MEXT by the time they offer the posts, based on the form in the following website by using the Cross-ministerial Research and Development Management System (e-Rad). However, if an institution has already submitted the checklist of misconduct in research activities on a separate occasion since April 2020, it does not have to submit a new one this time. Also, institutions that do not receive Funds from JSPS do not need to submit it.

Research institutions are asked to pay due attention as even if a research institute has publicized its posts, the published posts may be taken down and the institution may not be allowed to participate in the initiative if submission of the checklist of misconduct in research activities cannot be confirmed.

Please check the following MEXT website for details of the submission method for the Checklist of misconduct in research activities.

[URL] https://www.mext.go.jp/a_menu/jinzai/fusei/1374697.htm

*Note: Please note that the checklist can only be submitted via e-Rad. (Please be aware that registration usually takes about two weeks. As for the detailed procedures concerning e-Rad use, check the following website.

[URL] https://www.e-rad.go.jp/organ/index.html

(8) Measures against misconducts in research activities

If specified misconducts in research activities are found in this project, they will be

handled strictly as described below based on the guideline:

- Measures against misconducts found in research activities

(i) Measures to cancel agreements, etc.

If any misconduct (forgery, interpolation, and theft) is found in activities related to research tasks of this project, it will be possible to cancel/change the decision to grant Funds, and ask for the return of all or part of Funds. In addition, some agreements may not be concluded in and after the next year.

(ii) Measures to restrict applications and participation, etc.

As shown in the following table, we will take measures to restrict application to and participation in this project as well as all competitive funds, fellowships and commission, etc. projects granted by JSPS against a researcher who committed in a specified misconduct in research papers and reports, etc. and a researcher whose involvement in specified misconducts is not recognized but who fails to fulfill his/her duty as a good researcher responsible for the theses and report, etc. and fails to take full responsibility according to maliciousness of illegal actions and the extent of responsibilities.

In addition, when such restriction measures are taken, the information on misconducts may be provided to persons in charge of the competitive fund systems implemented by MEXT or the incorporated administrative agencies of MEXT (hereinafter "MEXT-related Competitive Fund System, etc.") and those in charge of the competitive fund system implemented by other Ministers and their incorporated administrative agencies (hereinafter, "Other Ministry-related Competitive Fund System, etc."). Then, applications and participation in "MEXT-related Competitive Fund System, etc." and "Other Ministry-related Competitive Fund System, etc." may also be restricted.

<table>
<tr><th colspan="3">Those subject to measures</th><th>Extent of specified misconducts</th><th>Period of grant suspension</th></tr>
<tr><td rowspan="2">Those involved in specified misconducts</td><td colspan="2">1. Especially malevolent person, who intends to commit specified misconduct from the very beginning of a research</td><td></td><td>10 years</td></tr>
<tr><td>2. An author of thesis, etc., related to a research where</td><td>An author who is responsible for the thesis, etc., (supervisor, representative author, or a</td><td>It is judged that the influence on the research progress in the field and the society is large and that the maliciousness of conduct is high</td><td>5-7 years</td></tr>
</table>

<table>
<tr><td rowspan="2"></td><td rowspan="3">specified misconduct is found</td><td>person certified as the one who bear responsibility equally with these persons)</td><td>It is judged that the influence on the research progress in the field and the society is small and that the maliciousness of conduct is low</td><td>3-5 years</td></tr>
<tr><td>Authors other than the above</td><td></td><td>2-3 years</td></tr>
<tr><td></td><td colspan="2" rowspan="2">3. Those involved in specified misconducts excluding 1. and 2.</td><td rowspan="2"></td><td rowspan="2">2-3 years</td></tr>
<tr><td></td></tr>
<tr><td colspan="3" rowspan="2">An author who is not involved in the specified misconducts but is responsible to a certain extent for the content of a thesis, etc., on researches involved in the specified misconducts as he or she neglected duty of care, etc. (supervisor, representative author, or a person certified as the one who bear responsibility equally with these persons)</td><td>It is judged that the influence on the research progress in the field and the society is large and that the maliciousness of conduct is high</td><td>2-3 years</td></tr>
<tr><td>It is judged that the influence on the research progress in the field and the society is small and that the maliciousness of conduct is low</td><td>1-2 years</td></tr>
</table>

(Source: Japan Society for the Promotion of Science Regulations No. 19 Regulations on Responding to Misconduct in Research and Misuse of Research Funds Attached Table 1 [Article 16 1-4 Specified Misconduct Relations])

(iii) Measures against researchers whose application and participation are restricted in the other competitive fund systems and basic expenses

Researchers whose application and participation are restricted due to misconducts in research activities utilizing MEXT-related competitive fund systems other than this project, operational grants for the national university corporation, Inter-University Research Institute Corporations, and incorporated administrative agencies within the jurisdiction of MEXT, basic expenses including funds to private schools, and competitive fund system related to other Ministries are restricted from applying to and participating in this project during the time.

(iv) Release of false cases

If any misconduct in research activities are found in this project, as a rule, MEXT and JSPS shall publicize details of the case (false case name, types of misconducts, types of

research field of false case, a name of expenses where any misconduct is made, overview of the false case, measures taken by research institution and by a distributing agency).

In addition, the guidelines require research institutions to promptly publicize investigation results when any misconduct is found. Research institutions should properly satisfy this requirement.

[URL] https://www.mext.go.jp/a_menu/jinzai/fusei/1360483.htm

(9) Obligation to receive research ethics and compliance education

Researchers, etc. who participate in a research task in this project will take part in classes on research ethics education to prevent misconducts in research activities sought by the "Guidelines for Responding to Misconduct in Research" and on compliance education required by “Guidelines for the Management and Audit of Public Research Funds In Research Institutions."

After being selected as an EYR, a person responsible for its implementation* need to submit a document having confirmed that all participating researchers have taken research ethics and compliance education classes and understood the contents taught.

*The person responsible for its implementation basically is assumed to be the representative of the research institution or the person responsible for the project.

(Reference form)

(month) (day), (year)

TO: XXXX

XX XX, President of XX University

Confirmation of the completion of research ethics and compliance education

We have confirmed that all the researchers, etc. who participate in the research tasks of this project attended classes on research ethics education required by the "Guidelines for Responding to Misconduct in Research" to prevent misconducts in research activities and on compliance education required by the “Guidelines for the Management and Audit of Public Research Expenditures In Research Institutions" and that all of them understood the content

(10) Measures to be taken in case of violating related laws and regulations, etc.

If a researcher violates related laws and regulations/guidelines, etc., and implement his/her research activities, Funds may not be granted or canceled.

(11) Security trade control (handling of technology leak outside Japan)

Research institutions work on research of numerous advanced technologies, and universities, in particular, face the risk of leak of advanced technology, research materials and equipment and their exploitation in development and manufacturing of weapon of mass destruction, etc., given the rise in the number of foreign students and researchers due to globalization. For this reason, upon carrying out various research activities, research institutions are required to take systematic measures to prevent research results that may be utilized for military purposes from ending up in the hands of parties who might engage in the activities of concern, such as developers of weapon of mass destruction or terrorist groups.

In Japan, exports are controlled* based on the Foreign Exchange and Foreign Trade Act (Act No. 228 of 1949; hereinafter referred to as the "Foreign Exchange Control Act"). Therefore, when a party trying to export (offer) goods and technologies controlled by the Foreign Exchange Control Act, it as a rule needs to obtain the permission of the Minister of Economy, Trade and Industry. Research institutions are requested to comply with the Foreign Exchange Control Act and other laws, ordinances, guidelines and notifications of the government. If a research institution violates related laws, ordinances or guidelines and carries out research, distribution of research grants or decision of grant distribution may be cancelled in addition to legal disposition and penal provisions.

*At present, Japan's security trade control system consists of two systems based on international agreements, etc. of 1) a system requiring the permission of the Minister of Economy, Trade and Industry, as a rule, if a party tries to export (offer) goods (technology) with specs and functions of a certain level and above such as carbon fibers and numerical controlled machine tools (the List Control) and 2) a system requiring the permission of the Minister of Economy, Trade and Industry if a party tries to export (offer) goods (technology) that do not fall under the list control and satisfy certain requirements (application requirements, user requirements or inform requirements; Catch-all Control).

Not only exports of goods but also offering of technology is subject to the control by the Foreign Exchange Control Act. It is necessary to obtain permission in advance for offering List Control technology to a non-resident or outside Japan. Offering of technology includes not only offering of technical information such as design drawing, specifications, manual, test piece or prototype on paper, in e-mail or in memory medium such as CD, DVD or USB memory but also offering of operation knowledge through technology instructions and skill training as well as technology support in seminars. Acceptance of foreign students and joint research with them may also include ample transactions of technology that can be subject to control by the Foreign Exchange Control Act.

Details of security export control are available on the websites of the Ministry of Economy, Trade and Industry and other organizations. See below for more information.

- Security export control (in general) by the Ministry of Economy, Trade and Industry
  https://www.meti.go.jp/policy/anpo/
- Security export control handbook by the Ministry of Economy, Trade and Industry
  https://www.meti.go.jp/policy/anpo/seminer/shiryo/handbook.pdf
- Center for Information on Security Trade Control
  http://www.cistec.or.jp/index.html
- Guidance on sensible nuclear technology control in relation with security trade control (for universities and research institutions)
  https://www.meti.go.jp/policy/anpo/law_document/tutatu/t07sonota/t07sonota_jishukanri03.pdf

(12) Promotion of public utilization of research facility/equipment

"Competitive Research Fund Reform toward Sustainable Creation of Research Results (interim report)" (Investigative Commission on Competitive Research Expenditures Reform on June 24, 2015) stipulates relatively large-sized facility/equipment with high flexibility should be shared as a rule, on the condition of the full achievement of the very purpose of research.

In addition, university and a National Research and Development Agency, etc. are required to operate "Research Facility/Equipment Sharing System in the Research Organization Unit" (hereinafter, "Equipment Sharing System") in "Introduction of New Research Facility/Equipment Sharing Integrated with Research System Management" (November 2015 by Sub-committee, Council for Science and Technology of Advanced Research Infrastructure).

In light of these, it is desirable to actively work on sharing research facility/equipment to be purchased through this project, especially the large-sized facility/equipment with high flexibility as far as they are properly managed in accordance with the management conditions of other research funds and the research facility/equipment sharing system of his/her belonging institution or organization to the extent that does not interfere with the promotion of the research task for this project, utilizing those purchased by other research expenditures as well as purchasing/sharing those using with several research expenditures.

In addition, it is also desirable to promote the sharing of research facility/equipment beyond frameworks of a research organization/institution by actively striving to collaborate with established sharing systems such as "University Collaboration Network for Efficient Utilization of Research Equipment" implemented by the Inter-University Research Institute Corporation National Institutes of Natural Sciences (NINS) with the aim of interoperation with equipment all over Japan and "Equipment Support Center

Development Project" provided by national universities.

- "Introduction of New Research Facility/Equipment Sharing Integrated with Research System Management"
(November 25, 2015 by Sub-committee, Council for Science and Technology of Advanced Research Infrastructure)
https://www.mext.go.jp/component/b_menu/shingi/toushin/__icsFiles/afieldfile/2016/01/21/1366216_01_1.pdf

- "Competitive Research Fund Reform toward Sustainable Creation of Research Results (interim report)"
(Investigative Commission on Competitive Research Expenditures Reform on June 24, 2015)
https://www.mext.go.jp/b_menu/shingi/chousa/shinkou/039/gaiyou/1359306.htm

- Unification of the use rule, etc. in the competitive fund
(The agreement at the liaison meeting of relevant Ministries on the competitive fund revised on April 20, 2017)
https://www8.cao.go.jp/cstp/compefund/shishin3_siyouruuru.pdf

- "University Collaboration Network for Efficient Utilization of Research Equipment"
https://chem-eqnet.ims.ac.jp/

(13) Improvement of the treatment of students in doctoral course (Latter period)

In the "Science, Technology and Innovation Basic Plan" (March 26, 2021 by Cabinet decision), it is set out as a numeric target to aim at triplicating the number of doctoral course students who receive an amount equivalent to the cost of living (which corresponds to about 30% of all the students enrolled in doctoral programs who receive around an amount equivalent to the cost of living) so as to enhance financial support to graduate students, especially doctoral course students, and attract talented students and working adults from in and outside of Japan. The Basic Plan expects that "in order to promote payment of salary in an appropriate level as a research assistant (RA) to doctoral course students from the competitive research funds and joint research funds, each enterprise, university, and similar institution will formulate rules on the expenditures for RA costs relating to employment and rewards of RAs, etc. and implement the rules as from FY2021" and requires expansion of employment and improvement of treatment of doctoral course students as RAs, etc. in each university and research and development corporation.

Furthermore, it is specified in the "Guidelines for employment and training of post-doctoral researchers." (December 3, 2020 by MEXT's Science and Technology Academic

Council's Personnel Committee) that doctoral course students are "not only students but also researchers, and improving the environment and ensuring appropriate treatment for conducting research activities is an important obligation as universities fostering researchers"; "it is particularly important to treat them based on appropriate evaluation of their contributions, such as setting up consideration that matches the nature and content of their duties and paying salary according to the hours during which they have engaged in the duties under the appropriate work management"; and "universities, etc. need to review internal rules and regulations so that the costs required for hiring RAs can be recorded as direct expenses when applying for competitive research funds, etc. and consideration in an appropriate level can be paid to RAs."

Based on these, please make efforts to actively hire doctoral course students necessary for fulfilling research as RAs, etc., establish a unit price suitable for the nature and content of the duties, and pay a salary according to the hours during which they engage in the duties under the appropriate work management.

(14) Support for various career paths for young postdoctoral researcher

In "Basic Policy on Support for Diverse Career Paths for Young Postdoctoral Fellows to Be Employed through the MEXT Public Research Funds" (December 20, 2011 by MEXT's Science and Technology Academic Council's Personnel Committee) (https://www.mext.go.jp/b_menu/shingi/gijyutu/gijyutu10/toushin/1317945.htm), it requires "public research institutes and representative researchers that hire young postdoctoral researchers by public research funds to actively work on supporting them to ensure various career paths in and out of Japan." Based on the policy, when your research is adopted by this project and you hire the young postdoctoral researchers using the Funds, please make proactive efforts to support the establishment of various career paths for such researchers.

(15) Registration of researcher information on researchmap

researchmap (https://researchmap.jp/) is a researcher information database which is one of the largest in Japan as a comprehensive list of researchers in Japan. The registered information on achievements can be publicized on internet. In addition, researchmap is linked to e-Rad and teaching staff databases of numerous universities. The registered information can be used in another system, so researchers don't have to register the same information multiple times in various application forms and databases.

The information registered on researchmap is effectively utilized for surveys on science and technology policy planning of the government, etc. and for a statistical purposes. The applicants of this project are asked to cooperate with the registration on researchmap.

(16) Handling of personal information

The personal information contained in the application documents shall be properly managed in accordance with the “Act on the Protection of Personal Information Held by Administrative Organs,” the “Act on the Protection of Personal Information Held by Incorporated Administrative Agencies, etc.,” and other relevant laws and regulations. Necessary measures shall be taken in managing personal information to prevent leakage or loss of and damage to the personal information or otherwise. The personal information is utilized by MEXT and JSPS to perform their operations (including the provision of information to the research institutions that offered posts as well as Bridge Promoters) (including the provision of personal information so that an outsourced private company, etc. can process and manage data by computer). In addition to this, MEXT may provide various information to the Cabinet Office via e-Rad managed and operated by MEXT (please refer to the terms of use and the personal information handling policy of e-Rad for details on handling of personal information in e-Rad use). To prepare such information, researchers may be asked to cooperate with a variety of work, confirmation of information, and similar tasks.

In addition, if an applicant is appointed as EYR, his/her name, areas of research, the employed research institution, etc. will be disclosed through MEXT website, etc. Furthermore, based on research results shown in III. 4. and IV. 3., EYRs' activities are released through MEXT website, etc.

Personal information of researchers residing in the European Economic Area (EEA) including EU (hereinafter, the “EEA Residents”) will be handled in accordance with the EU General Data Protection Regulation (GDPR) No. 2016/679. EEA Residents are therefore asked to check the following JSPS website.

- To those who reside in the European Economic Area (EEA)

[URL] https://www.jsps.go.jp/access_contact/info.html

As for the contact information concerning handling of personal information, please also check the following MEXT website.

[URL] https://www.mext.go.jp/b_menu/koukai/kojin/1293439.htm

(17) The principle of self-responsibility

MEXT checks the post(s) offered by research institutions from the viewpoint of conformity with the requirements shown in II. 1. above. However, MEXT is not responsible for employment conditions determined as a result of negotiation among the parties between the research institutions and candidates, the subsequent research environment and the results of tenure reviews, etc.

VI. Contact Information

<Project in general>

Human Resources Policy Promotion Office, Human Resources Policy Division, Science and Technology Policy Bureau, MEXT
TEL: 03-5253-4111 (Extension 4021)
E-mail: takuetsu@mext.go.jp

<Preparation/submission of documents and granting and implementation of funds>

Research Fellowship Division, Japan Society for the Promotion of Science
Phone: 03-3263-3769 (application documents)
03-3263-0978 (funds)
E-mail: takuken@jsps.go.jp

(Appended Table-1)

[A] a. Research expenditures for EYRs

Expense items	Category	Remarks
Facility/equipment expenses		Expenses to obtain, produce, or increase the efficiency of facility/equipment (Asset). *The purchase process/definition of facility/equipment is based on regulations, etc. of the institution. *Real estate and real estate ancillary facilities cannot be purchased (the definition is in accordance with the institution's regulations).
Salaries and other personal expenditures		Expenses to pay compensation for the labor to a person concluding an employment agreement etc. and engaged in a project. Legal welfare expenses borne by the employer. *Use the salary regulations of the institution to calculate salaries and other personal expenditures. *This cannot be appropriated for EYR's salaries and other personal expenditures.
Project implementation expenses	Expenses for consumable goods	Expenses to purchase products that do not fall under facility and equipment expenses. *The purchase process/definition of consumable goods is based on regulations, etc. of the institution.
	Domestic travel expenses	Expenses related to domestic business travels. The expenses include travel expenses related to invitation of domestic outside collaborators (excluding those who belong to an implementing institution). *Use the travel expense regulations of the institution to calculate travel expenses.
	Overseas travel expenses	Expenses related to overseas business travels (including domestic travels). *Use the travel expense regulations of the institution to calculate travel expenses.
	Travel expenses for foreign invitees	Expenses related to invite researchers, etc. from foreign countries. *Use the travel expense regulations of the institution to calculate travel expenses.
	Honoraria	Rewards for their attendance in a meeting and a lecture, etc. of outside collaborators (excluding those belonging to an implementing institution) *Use the reward regulations of the institution to calculate rewards.
	Meeting expenses	The minimum food expenses related to meetings including outsiders. *In providing food expenses, etc., the minimum is provided according to regulations of institutions. However, Funds cannot be expended for alcohol.
	Communication/ Transportation expenses	Expenses related to transportation of articles and data communication.
	Printing and	Expenses related to printing and binding of documents,

	binding expenses	etc.
	Rental expenses	Expenses related to rental of conference sites, rental expenses of articles, etc., and rent.
	Miscellaneous service expenses	Expenses related to the services including data analysis, software development, etc. Expenses related to participation in an academic conference and submission of a thesis.
	Utility costs	Utility costs required to perform researches related to this project. *The utility costs not related to this project cannot be paid with these subsidies. Please clarify calculation grounds for the costs.

Note 1: Research expenditures for Excellent Young Researchers (EYR) cannot be diverted to costs of building research environment. Costs of building research environment may be diverted to research expenditures for EYRs, but it may not exceed the upper limit per annum of research expenditures for EYRs stipulated in the Application Guidelines.

Note 2: Research expenditures for EYRs and costs of building research environment cannot be put together and used.

(Appended Table-2)

[A] b. Costs of building research environment

Expense items	Category	Remarks
Facility/equipment expenses		Expenses to obtain, produce, or increase the efficiency of facility/equipment (Asset). *The purchase process/definition of facility/equipment is based on regulations, etc. of the institution. *Real estate and real estate ancillary facilities cannot be purchased (the definition is in accordance with the institution's regulations).
Salaries and other personal expenditures		Expenses to pay compensation for the labor to a person concluding an employment agreement etc. and engaged in a project. Legal welfare expenses borne by the employer. *Use the salary regulations of the institution to calculate salaries and other personal expenditures. *This cannot be appropriated for EYR's salaries and other personal expenditures.
Project implementation expenses	Expenses for consumable goods	Expenses to purchase products that do not fall under facility and equipment expenses. *The purchase process/definition of consumable goods is based on regulations, etc. of the institution.
	Domestic travel expenses	Expenses related to domestic business travels. The expenses include travel expenses related to invitation of domestic outside collaborators (excluding those who belong to an implementing institution). *Use the travel expense regulations of the institution to calculate travel expenses.
	Overseas travel expenses	Expenses related to overseas business travels (including domestic travels). *Use the travel expense regulations of the institution to calculate travel expenses.
	Travel expenses for foreign invitees	Expenses related to invite researchers, etc. from foreign countries. *Use the travel expense regulations of the institution to calculate travel expenses.
	Honoraria	Rewards for attendance in a meeting and mentoring, etc. of outside collaborators (excluding those belonging to an implementing institution). Rewards for lectures, etc. *Use the reward regulations of the institution to calculate rewards.
	Meeting expenses	The minimum food expenses related to the opening of committee to evaluate EYRs (including outsiders). *In providing food expenses, etc., the minimum is provided according to regulations of institutions. However, Funds cannot be expended for alcohol.
	Communication/ Transportation expenses	Expenses related to transportation of articles and data communication.
	Printing and binding expenses	Expenses related to printing and binding of documents, etc.
	Rental expenses	Expenses related to rental of conference sites, rental expenses of articles, etc., and rent.

	Miscellaneous service expenses	Expenses related to the services such as dispatching of workers responsible for maintenance/management of computing machines and network, etc. and providing other supporting operations. Expenses related to participation in an academic conference and submission of a thesis.
	Utility costs	Utility costs required for the implementation of this project. *The utility costs not related to this project cannot be paid with these subsidies. Please clarify calculation grounds for the costs.

Note 1: Research expenditures for Excellent Young Researchers (EYR) cannot be diverted to costs of building research environment. Costs of building research environment may be diverted to research expenditures for EYRs, but it may not exceed the upper limit per annum of research expenditures for EYRs stipulated in the Application Guidelines.

Note 2: Research expenditures for EYRs and costs of building research environment cannot be put together and used.

Note 3: The expense can be used to build a framework for young researchers to carry out research in a stable and independent manner, but “young researchers” here do not include students.

(Appended Table-3)

[B] Industry-academia collaboration activity expenditures

Expense items	Category	Remarks
Joint research expenses		Joint research expenses paid to a university, etc. based on a joint research agreement with the university, etc.
Delegated research expenses		Delegated research expenses paid to a university, etc. based on a delegated research agreement with the university, etc.

Note 1: The expenditures cannot be diverted together with the research expenditures for EYRs and costs of building research environment.

Note 2: The expenditures cannot be put together and used with research expenditures for EYRs and costs of building research environment.

About Table of Research field/Research content

Table of Research field/Research content shows research fields and research contents for filling out the application form.

Keyword list offers some examples related research contents. They help applicants understand the concrete Research contents. However, it does not exclude field of contents of which are not included the examples.

<For Research institution>

Please refer to when selecting Research field and Keyword which are most suitable for post.

<For Researchers>

Review for EYR candidates' selection will be conducted in nine research fields (Humanities, Social sciences, Mathematical and physical sciences, Chemistry, Engineering sciences, Informatics, Biological sciences, Agriculture/Environmental sciences, Medicine dentistry and pharmacy).

Applicants should select a "Research content (Basic Section)" that is most suitable for their own research task.

Please note that, some items of Basic Section may be presented in plural Research content (Medium-sized Section) and Research field. If applicants select one of the Basic Section, then they should also select one from either Medium-sized Section or Research field.

研究分野・研究内容一覧　Table of Research field/Research content

（注）　※1　中区分の選択の必要がある小区分
※1　Basic Section that should also select Medium-sized Section
※2　研究分野の選択の必要がある小区分
※2　Basic Section that should also select Research field

研究分野 Research field	研究内容（中区分/小区分）		Research content（Medium-sized Section/Basic Section）	
人文学 Humanities	**11　思想、芸術およびその関連分野**		**11　Philosophy, art, and related fields**	
	01010	哲学および倫理学関連	01010	Philosophy and ethics-related
	01020	中国哲学、印度哲学および仏教学関連	01020	Chinese philosophy, Indian philosophy and Buddhist philosophy-related
	01030	宗教学関連	01030	Religious studies-related
	01040	思想史関連	01040	History of thought-related
	01050	美学および芸術論関連	01050	Aesthetics and art studies-related
	01060	美術史関連	01060	History of arts-related
	01070	芸術実践論関連	01070	Theory of art practice-related
	01080	科学社会学および科学技術史関連	01080	Sociology of science, history of science and technology-related
	90010	デザイン学関連　※1	90010	Design-related　※1
	12　文学、言語学およびその関連分野		**12　Literature, linguistics, and related fields**	
	02010	日本文学関連	02010	Japanese literature-related
	02020	中国文学関連	02020	Chinese literature-related
	02030	英文学および英語圏文学関連	02030	English literature and literature in the English language-related
	02040	ヨーロッパ文学関連	02040	European literature-related
	02050	文学一般関連	02050	Literature in general-related
	02060	言語学関連	02060	Linguistics-related
	02070	日本語学関連	02070	Japanese linguistics-related
	02080	英語学関連	02080	English linguistics-related
	02090	日本語教育関連　※1	02090	Japanese language education-related　※1
	02100	外国語教育関連　※1	02100	Foreign language education-related　※1
	90020	図書館情報学および人文社会情報学関連　※1	90020	Library and information science, humanistic and social informatics-related　※1
	13　歴史学、考古学、博物館学およびその関連分野		**13　History, archaeology, museology, and related fields**	
	03010	史学一般関連	03010	Historical studies in general-related
	03020	日本史関連	03020	Japanese history-related
	03030	アジア史およびアフリカ史関連	03030	History of Asia and Africa-related
	03040	ヨーロッパ史およびアメリカ史関連	03040	History of Europe and America-related
	03050	考古学関連	03050	Archaeology-related
	03060	文化財科学関連	03060	Cultural assets study-related
	03070	博物館学関連	03070	Museology-related
	14　地理学、文化人類学、民俗学およびその関連分野		**14　Geography, cultural anthropology, folklore, and related fields**	
	04010	地理学関連	04010	Geography-related
	04020	人文地理学関連	04020	Human geography-related
	04030	文化人類学および民俗学関連	04030	Cultural anthropology and folklore-related
	80010	地域研究関連　※1	80010	Area studies-related　※1
	80020	観光学関連　※1	80020	Tourism studies-related　※1
	80030	ジェンダー関連　※1	80030	Gender studies-related　※1
社会科学 Social sciences	**21　法学およびその関連分野**		**21　Law and related fields**	
	05010	基礎法学関連	05010	Legal theory and history-related
	05020	公法学関連	05020	Public law-related
	05030	国際法学関連	05030	International law-related
	05040	社会法学関連	05040	Social law-related
	05050	刑事法学関連	05050	Criminal law-related
	05060	民事法学関連	05060	Civil law-related
	05070	新領域法学関連	05070	New fields of law-related
	22　政治学およびその関連分野		**22　Political science and related fields**	
	06010	政治学関連	06010	Politics-related
	06020	国際関係論関連	06020	International relations-related
	80010	地域研究関連　※1	80010	Area studies-related　※1
	80030	ジェンダー関連　※1	80030	Gender studies-related　※1
	23　経済学、経営学およびその関連分野		**23　Economics, business administration, and related fields**	
	07010	理論経済学関連	07010	Economic theory-related
	07020	経済学説および経済思想関連	07020	Economic doctrines and economic thought-related
	07030	経済統計関連	07030	Economic statistics-related
	07040	経済政策関連	07040	Economic policy-related
	07050	公共経済および労働経済関連	07050	Public economics and labor economics-related
	07060	金融およびファイナンス関連	07060	Money and finance-related
	07070	経済史関連	07070	Economic history-related
	07080	経営学関連	07080	Business administration-related
	07090	商学関連	07090	Commerce-related
	07100	会計学関連	07100	Accounting-related
	80020	観光学関連　※1	80020	Tourism studies-related　※1
	24　社会学およびその関連分野		**24　Sociology and related fields**	
	08010	社会学関連	08010	Sociology-related
	08020	社会福祉学関連	08020	Social welfare-related
	08030	家政学および生活科学関連	08030	Family and consumer sciences, and culture and living-related
	80020	観光学関連　※1	80020	Tourism studies-related　※1
	80030	ジェンダー関連　※1	80030	Gender studies-related　※1

研究分野・研究内容一覧　Table of Research field/Research content

（注）　※1　中区分の選択の必要がある小区分
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※2　Basic Section that should also select Research field

研究分野 Research field	研究内容（中区分/小区分）		Research content（Medium-sized Section/Basic Section）	
社会科学　（続き） Social sciences （continued）	**25　教育学およびその関連分野**		**25　Education and related fields**	
	09010	教育学関連	09010	Education-related
	09020	教育社会学関連	09020	Sociology of education-related
	09030	子ども学および保育学関連	09030	Childhood and nursery/pre-school education-related
	09040	教科教育学および初等中等教育学関連	09040	Education on school subjects and primary/secondary education-related
	09050	高等教育学関連	09050	Tertiary education-related
	09060	特別支援教育関連	09060	Special needs education-related
	09070	教育工学関連	09070	Educational technology-related
	09080	科学教育関連	09080	Science education-related
	02090	日本語教育関連　※1	02090	Japanese language education-related　※1
	02100	外国語教育関連　※1	02100	Foreign language education-related　※1
	26　心理学およびその関連分野		**26　Psychology and related fields**	
	10010	社会心理学関連	10010	Social psychology-related
	10020	教育心理学関連	10020	Educational psychology-related
	10030	臨床心理学関連	10030	Clinical psychology-related
	10040	実験心理学関連	10040	Experimental psychology-related
	90030	認知科学関連　※1	90030	Cognitive science-related　※1
数物系科学 Mathematical and physical sciences	**31　代数学、幾何学およびその関連分野**		**31　Algebra, geometry, and related fields**	
	11010	代数学関連	11010	Algebra-related
	11020	幾何学関連	11020	Geometry-related
	32　解析学、応用数学およびその関連分野		**32　Analysis, applied mathematics, and related fields**	
	12010	基礎解析学関連	12010	Basic analysis-related
	12020	数理解析学関連	12020	Mathematical analysis-related
	12030	数学基礎関連	12030	Basic mathematics-related
	12040	応用数学および統計数学関連	12040	Applied mathematics and statistics-related
	33　物性物理学およびその関連分野		**33　Condensed matter physics and related fields**	
	13010	数理物理および物性基礎関連	13010	Mathematical physics and fundamental theory of condensed matter physics-related
	13020	半導体、光物性および原子物理関連	13020	Semiconductors, optical properties of condensed matter and atomic physics-related
	13030	磁性、超伝導および強相関系関連	13030	Magnetism, superconductivity and strongly correlated systems-related
	13040	生物物理、化学物理およびソフトマターの物理関連	13040	Biophysics, chemical physics and soft matter physics-related
	34　プラズマ学およびその関連分野		**34　Plasma science and related fields**	
	14010	プラズマ科学関連	14010	Fundamental plasma-related
	14020	核融合学関連	14020	Nuclear fusion-related
	14030	プラズマ応用科学関連	14030	Applied plasma science-related
	80040	量子ビーム科学関連　※1	80040	Quantum beam science-related　※1
	35　素粒子、原子核、宇宙物理学およびその関連分野		**35　Particle-, nuclear-, astro-physics, and related fields**	
	80040	量子ビーム科学関連　※1	80040	Quantum beam science-related　※1
	15010	素粒子、原子核、宇宙線および宇宙物理に関連する理論	15010	Theoretical studies related to particle-, nuclear-, cosmic ray and astro-physics
	15020	素粒子、原子核、宇宙線および宇宙物理に関連する実験	15020	Experimental studies related to particle-, nuclear-, cosmic ray and astro-physics
	36　天文学およびその関連分野		**36　Astronomy and related fields**	
	16010	天文学関連	16010	Astronomy-related
	37　地球惑星科学およびその関連分野		**37　Earth and planetary science and related fields**	
	17010	宇宙惑星科学関連	17010	Space and planetary sciences-related
	17020	大気水圏科学関連	17020	Atmospheric and hydrospheric sciences-related
	17030	地球人間圏科学関連	17030	Human geosciences-related
	17040	固体地球科学関連	17040	Solid earth sciences-related
	17050	地球生命科学関連	17050	Biogeosciences-related

研究分野・研究内容一覧 Table of Research field/Research content

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※2 Basic Section that should also select Research field

研究分野 Research field	研究内容（中区分/小区分）		Research content（Medium-sized Section/Basic Section）	
化学 Chemistry	**41 物理化学、機能物性化学、無機・錯体化学、分析化学、無機材料化学、エネルギー関連化学およびその関連分野**		**41**	**Physical chemistry, functional solid state chemistry, inorganic/coordination chemistry, analytical chemistry, inorganic materials chemistry, energy-related chemistry, and related fields**
	物理化学、機能物性化学およびその関連分野		Physical chemistry, functional solid state chemistry, and related fields	
	32010	基礎物理化学関連	32010	Fundamental physical chemistry-related
	32020	機能物性化学関連	32020	Functional solid state chemistry-related
	無機・錯体化学、分析化学およびその関連分野		Inorganic/coordination chemistry, analytical chemistry, and related fields	
	34010	無機・錯体化学関連	34010	Inorganic/coordination chemistry-related
	34020	分析化学関連	34020	Analytical chemistry-related
	34030	グリーンサステイナブルケミストリーおよび環境化学関連	34030	Green sustainable chemistry and environmental chemistry-related
	無機材料化学、エネルギー関連化学およびその関連分野		Inorganic materials chemistry, energy-related chemistry, and related fields	
	36010	無機物質および無機材料化学関連	36010	Inorganic compounds and inorganic materials chemistry-related
	36020	エネルギー関連化学	36020	Energy-related chemistry
	42 有機化学、高分子、有機材料、生体分子化学およびその関連分野		**42**	**Organic chemistry, polymers, organic materials, biomolecular chemistry, and related fields**
	有機化学およびその関連分野		Organic chemistry and related fields	
	33010	構造有機化学および物理有機化学関連	33010	Structural organic chemistry and physical organic chemistry-related
	33020	有機合成化学関連	33020	Synthetic organic chemistry-related
	高分子、有機材料およびその関連分野		Polymers, organic materials, and related fields	
	35010	高分子化学関連	35010	Polymer chemistry-related
	35020	高分子材料関連	35020	Polymer materials-related
	35030	有機機能材料関連	35030	Organic functional materials-related
	生体分子化学およびその関連分野		Biomolecular chemistry and related fields	
	37010	生体関連化学	37010	Bio-related chemistry
	37020	生物分子化学関連	37020	Chemistry and chemical methodology of biomolecules-related
	37030	ケミカルバイオロジー関連	37030	Chemical biology-related
工学系科学 Engineering sciences	**51 材料力学、生産工学、設計工学、原子力工学、地球資源工学、エネルギー学、流体工学、熱工学、機械力学、ロボティクス、航空宇宙工学、船舶海洋工学およびその関連分野**		**51**	**Mechanics of materials, production engineering, design engineering, nuclear engineering, earth resources engineering, energy engineering, fluid engineering, thermal engineering, mechanical dynamics, robotics, aerospace engineering, marine and maritime engineering, and related fields**
	材料力学、生産工学、設計工学およびその関連分野		Mechanics of materials, production engineering, design engineering, and related fields	
	18010	材料力学および機械材料関連	18010	Mechanics of materials and materials-related
	18020	加工学および生産工学関連	18020	Manufacturing and production engineering-related
	18030	設計工学関連	18030	Design engineering-related
	18040	機械要素およびトライボロジー関連	18040	Machine elements and tribology-related
	原子力工学、地球資源工学、エネルギー学およびその関連分野		Nuclear engineering, earth resources engineering, energy engineering, and related fields	
	31010	原子力工学関連	31010	Nuclear engineering-related
	31020	地球資源工学およびエネルギー学関連	31020	Earth resource engineering, Energy sciences-related
	流体工学、熱工学およびその関連分野		Fluid engineering, thermal engineering, and related fields	
	19010	流体工学関連	19010	Fluid engineering-related
	19020	熱工学関連	19020	Thermal engineering-related
	機械力学、ロボティクスおよびその関連分野		Mechanical dynamics, robotics, and related fields	
	20010	機械力学およびメカトロニクス関連	20010	Mechanics and mechatronics-related
	20020	ロボティクスおよび知能機械システム関連	20020	Robotics and intelligent system-related
	航空宇宙工学、船舶海洋工学およびその関連分野		Aerospace engineering, marine and maritime engineering, and related fields	
	24010	航空宇宙工学関連	24010	Aerospace engineering-related
	24020	船舶海洋工学関連	24020	Marine engineering-related
	52 電気電子工学、応用物理物性、応用物理工学およびその関連分野		**52**	**Electrical and electronic engineering, applied condensed matter physics, applied physics and engineering, and related fields**
	電気電子工学およびその関連分野		Electrical and electronic engineering and related fields	
	21010	電力工学関連	21010	Power engineering-related
	21020	通信工学関連	21020	Communication and network engineering-related
	21030	計測工学関連	21030	Measurement engineering-related
	21040	制御およびシステム工学関連	21040	Control and system engineering-related
	21050	電気電子材料工学関連	21050	Electric and electronic materials-related
	21060	電子デバイスおよび電子機器関連	21060	Electron device and electronic equipment-related
	応用物理物性およびその関連分野		Applied condensed matter physics and related fields	
	29010	応用物性関連	29010	Applied physical properties-related
	29020	薄膜および表面界面物性関連	29020	Thin film/surface and interfacial physical properties-related
	29030	応用物理一般関連	29030	Applied condensed matter physics-related
	応用物理工学およびその関連分野		Applied physics and engineering and related fields	
	30010	結晶工学関連	30010	Crystal engineering-related
	30020	光工学および光量子科学関連	30020	Optical engineering and photon science-related

研究分野・研究内容一覧　Table of Research field/Research content

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研究分野 Research field	研究内容（中区分/小区分）		Research content（Medium-sized Section/Basic Section）	
工学系科学 （続き） **Engineering sciences** (continued)	**53 土木工学、社会システム工学、安全工学、防災工学、建築学およびその関連分野**		**53 Civil engineering, social systems engineering, safety engineering, disaster prevention engineering, architecture, building engineering, and related fields**	
	土木工学およびその関連分野		Civil engineering and related fields	
	22010	土木材料、施工および建設マネジメント関連	22010	Civil engineering material, execution and construction management-related
	22020	構造工学および地震工学関連	22020	Structure engineering and earthquake engineering-related
	22030	地盤工学関連	22030	Geotechnical engineering-related
	22040	水工学関連	22040	Hydroengineering-related
	22050	土木計画学および交通工学関連	22050	Civil engineering plan and transportation engineering-related
	22060	土木環境システム関連	22060	Environmental systems for civil engineering-related
	社会システム工学、安全工学、防災工学およびその関連分野		Social systems engineering, safety engineering, disaster prevention engineering, and related fields	
	25010	社会システム工学関連	25010	Social systems engineering-related
	25020	安全工学関連	25020	Safety engineering-related
	25030	防災工学関連	25030	Disaster prevention engineering-related
	建築学およびその関連分野		Architecture, building engineering, and related fields	
	23010	建築構造および材料関連	23010	Building structures and materials-related
	23020	建築環境および建築設備関連	23020	Architectural environment and building equipment-related
	23030	建築計画および都市計画関連	23030	Architectural planning and city planning-related
	23040	建築史および意匠関連	23040	Architectural history and design-related
	90010	デザイン学関連　※1	90010	Design-related　※1
	54 材料工学、化学工学、ナノマイクロ科学およびその関連分野		**54 Materials engineering, chemical engineering, nano/micro science, and related fields**	
	材料工学およびその関連分野		Materials engineering and related fields	
	26010	金属材料物性関連	26010	Metallic material properties-related
	26020	無機材料および物性関連	26020	Inorganic materials and properties-related
	26030	複合材料および界面関連	26030	Composite materials and interfaces-related
	26040	構造材料および機能材料関連	26040	Structural materials and functional materials-related
	26050	材料加工および組織制御関連	26050	Material processing and microstructure control-related
	26060	金属生産および資源生産関連	26060	Metals production and resources production-related
	化学工学およびその関連分野		Chemical engineering and related fields	
	27010	移動現象および単位操作関連	27010	Transport phenomena and unit operations-related
	27020	反応工学およびプロセスシステム工学関連	27020	Chemical reaction and process system engineering-related
	27030	触媒プロセスおよび資源化学プロセス関連	27030	Catalyst and resource chemical process-related
	27040	バイオ機能応用およびバイオプロセス工学関連	27040	Biofunction and bioprocess engineering-related
	ナノマイクロ科学およびその関連分野		Nano/micro science and related fields	
	28010	ナノ構造化学関連	28010	Nanometer-scale chemistry-related
	28020	ナノ構造物理関連	28020	Nanostructural physics-related
	28030	ナノ材料科学関連	28030	Nanomaterials-related
	28040	ナノバイオサイエンス関連	28040	Nanobioscience-related
	28050	ナノマイクロシステム関連	28050	Nano/micro-systems-related
	90 人間医工学およびその関連分野		**90 Biomedical engineering and related fields**	
	90110	生体医工学関連　※2	90110	Biomedical engineering-related　※2
	90120	生体材料学関連　※2	90120	Biomaterials-related　※2
	90130	医用システム関連　※2	90130	Medical systems-related　※2
	90140	医療技術評価学関連　※2	90140	Medical technology assessment-related　※2
	90150	医療福祉工学関連　※2	90150	Medical assistive technology-related　※2
情報学 **Informatics**	**61 情報科学、情報工学、応用情報学およびその関連分野**		**61 Information science, computer engineering, applied informatics, and related fields**	
	情報科学、情報工学およびその関連分野		Information science, computer engineering, and related fields	
	60010	情報学基礎論関連	60010	Theory of informatics-related
	60020	数理情報学関連	60020	Mathematical informatics-related
	60030	統計科学関連	60030	Statistical science-related
	60040	計算機システム関連	60040	Computer system-related
	60050	ソフトウェア関連	60050	Software-related
	60060	情報ネットワーク関連	60060	Information network-related
	60070	情報セキュリティ関連	60070	Information security-related
	60080	データベース関連	60080	Database-related
	60090	高性能計算関連	60090	High performance computing-related
	60100	計算科学関連	60100	Computational science-related
	応用情報学およびその関連分野		Applied informatics and related fields	
	62010	生命、健康および医療情報学関連	62010	Life, health and medical informatics-related
	62020	ウェブ情報学およびサービス情報学関連	62020	Web informatics and service informatics-related
	62030	学習支援システム関連	62030	Learning support system-related
	62040	エンタテインメントおよびゲーム情報学関連	62040	Entertainment and game informatics-related
	90020	図書館情報学および人文社会情報学関連　※1	90020	Library and information science, humanistic and social informatics-related　※1
	62 人間情報学およびその関連分野		**62 Human informatics and related fields**	
	61010	知覚情報処理関連	61010	Perceptual information processing-related
	61020	ヒューマンインタフェースおよびインタラクション関連	61020	Human interface and interaction-related
	61030	知能情報学関連	61030	Intelligent informatics-related
	61040	ソフトコンピューティング関連	61040	Soft computing-related
	61050	知能ロボティクス関連	61050	Intelligent robotics-related
	61060	感性情報学関連	61060	Kansei informatics-related
	90010	デザイン学関連　※1	90010	Design-related　※1
	90030	認知科学関連　※1	90030	Cognitive science-related　※1

研究分野・研究内容一覧 Table of Research field/Research content

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研究分野 Research field	研究内容（中区分/小区分）		Research content（Medium-sized Section/Basic Section）	
生物系科学 Biological sciences	**71 分子レベルから細胞レベルの生物学およびその関連分野**		**71 Biology at molecular to cellular levels, and related fields**	
	43010	分子生物学関連	43010	Molecular biology-related
	43020	構造生物化学関連	43020	Structural biochemistry-related
	43030	機能生物化学関連	43030	Functional biochemistry-related
	43040	生物物理学関連	43040	Biophysics-related
	43050	ゲノム生物学関連	43050	Genome biology-related
	43060	システムゲノム科学関連	43060	System genome science-related
	72 細胞レベルから個体レベルの生物学およびその関連分野		**72 Biology at cellular to organismal levels, and related fields**	
	44010	細胞生物学関連	44010	Cell biology-related
	44020	発生生物学関連	44020	Developmental biology-related
	44030	植物分子および生理科学関連	44030	Plant molecular biology and physiology-related
	44040	形態および構造関連	44040	Morphology and anatomical structure-related
	44050	動物生理化学、生理学および行動学関連	44050	Animal physiological chemistry, physiology and behavioral biology-related
	73 個体レベルから集団レベルの生物学と人類学およびその関連分野		**73 Biology at organismal to population levels and anthropology, and related fields**	
	45010	遺伝学関連	45010	Genetics-related
	45020	進化生物学関連	45020	Evolutionary biology-related
	45030	多様性生物学および分類学関連	45030	Biodiversity and systematics-related
	45040	生態学および環境学関連	45040	Ecology and environment-related
	45050	自然人類学関連	45050	Physical anthropology-related
	45060	応用人類学関連	45060	Applied anthropology-related
	74 神経科学およびその関連分野		**74 Neuroscience and related fields**	
	46010	神経科学一般関連	46010	Neuroscience-general-related
	46020	神経形態学関連	46020	Anatomy and histopathology of nervous system-related
	46030	神経機能学関連	46030	Function of nervous system-related
農学・環境学 Agriculture /Environmental sciences	**81 農芸化学およびその関連分野**		**81 Agricultural chemistry and related fields**	
	38010	植物栄養学および土壌学関連	38010	Plant nutrition and soil science-related
	38020	応用微生物学関連	38020	Applied microbiology-related
	38030	応用生物化学関連	38030	Applied biochemistry-related
	38040	生物有機化学関連	38040	Bioorganic chemistry-related
	38050	食品科学関連	38050	Food sciences-related
	38060	応用分子細胞生物学関連	38060	Applied molecular and cellular biology-related
	82 生産環境農学、社会経済農学、農業工学およびその関連分野		**82 Agricultural and environmental biology, agricultural economics and rural sociology, agricultural engineering, and related fields**	
	生産環境農学およびその関連分野		Agricultural and environmental biology and related fields	
	39010	遺伝育種科学関連	39010	Science in plant genetics and breeding-related
	39020	作物生産科学関連	39020	Crop production science-related
	39030	園芸科学関連	39030	Horticultural science-related
	39040	植物保護科学関連	39040	Plant protection science-related
	39050	昆虫科学関連	39050	Insect science-related
	39060	生物資源保全学関連	39060	Conservation of biological resources-related
	39070	ランドスケープ科学関連	39070	Landscape science-related
	社会経済農学、農業工学およびその関連分野		Agricultural economics and rural sociology, agricultural engineering, and related fields	
	41010	食料農業経済関連	41010	Agricultural and food economics-related
	41020	農業社会構造関連	41020	Rural sociology and agricultural structure-related
	41030	地域環境工学および農村計画学関連	41030	Rural environmental engineering and planning-related
	41040	農業環境工学および農業情報工学関連	41040	Agricultural environmental engineering and agricultural information engineering-related
	41050	環境農学関連	41050	Environmental agriculture-related
	83 森林圏科学、水圏応用科学およびその関連分野		**83 Forestry and forest products science, applied aquatic science, and related fields**	
	40010	森林科学関連	40010	Forest science-related
	40020	木質科学関連	40020	Wood science-related
	40030	水圏生産科学関連	40030	Aquatic bioproduction science-related
	40040	水圏生命科学関連	40040	Aquatic life science-related
	84 獣医学、畜産学およびその関連分野		**84 Veterinary medical science, animal science, and related fields**	
	42010	動物生産科学関連	42010	Animal production science-related
	42020	獣医学関連	42020	Veterinary medical science-related
	42030	動物生命科学関連	42030	Animal life science-related
	42040	実験動物学関連	42040	Laboratory animal science-related
	85 環境解析評価、環境保全対策およびその関連分野		**85 Environmental analyses and evaluation, environmental conservation measure, and related fields**	
	環境解析評価およびその関連分野		Environmental analyses and evaluation and related fields	
	63010	環境動態解析関連	63010	Environmental dynamic analysis-related
	63020	放射線影響関連	63020	Radiation influence-related
	63030	化学物質影響関連	63030	Chemical substance influence on environment-related
	63040	環境影響評価関連	63040	Environmental impact assessment-related
	環境保全対策およびその関連分野		Environmental conservation measure and related fields	
	64010	環境負荷およびリスク評価管理関連	64010	Environmental load and risk assessment-related
	64020	環境負荷低減技術および保全修復技術関連	64020	Environmental load reduction and remediation-related
	64030	環境材料およびリサイクル技術関連	64030	Environmental materials and recycle technology-related
	64040	自然共生システム関連	64040	Social-ecological systems-related
	64050	循環型社会システム関連	64050	Sound material-cycle social systems-related
	64060	環境政策および環境配慮型社会関連	64060	Environmental policy and social systems-related

研究分野・研究内容一覧 Table of Research field/Research content

（注） ※1 中区分の選択の必要がある小区分
※1 Basic Section that should also select Medium-sized Section
※2 研究分野の選択の必要がある小区分
※2 Basic Section that should also select Research field

研究分野 Research field	研究内容（中区分/小区分）		Research content（Medium-sized Section/Basic Section）	
医歯薬学 Medicine dentistry and pharmacy	**91 薬学およびその関連分野**		**91 Pharmaceutical sciences and related fields**	
	47010	薬系化学および創薬科学関連	47010	Pharmaceutical chemistry and drug development sciences-related
	47020	薬系分析および物理化学関連	47020	Pharmaceutical analytical chemistry and physicochemistry-related
	47030	薬系衛生および生物化学関連	47030	Pharmaceutical hygiene and biochemistry-related
	47040	薬理学関連(A)	47040	Pharmacology-related(A)
	47050	環境および天然医薬資源学関連	47050	Environmental and natural pharmaceutical resources-related
	47060	医療薬学関連	47060	Clinical pharmacy-related
	92 生体の構造と機能およびその関連分野		**92 Biomedical structure and function and related fields**	
	48010	解剖学関連	48010	Anatomy-related
	48020	生理学関連	48020	Physiology-related
	48030	薬理学関連(B)	48030	Pharmacology-related(B)
	48040	医化学関連	48040	Medical biochemistry-related
	93 病理病態学、感染・免疫学およびその関連分野		**93 Pathology, infection/immunology, and related fields**	
	49010	病態医化学関連	49010	Pathological biochemistry-related
	49020	人体病理学関連	49020	Human pathology-related
	49030	実験病理学関連	49030	Experimental pathology-related
	49040	寄生虫学関連	49040	Parasitology-related
	49050	細菌学関連	49050	Bacteriology-related
	49060	ウイルス学関連	49060	Virology-related
	49070	免疫学関連	49070	Immunology-related
	94 腫瘍学、ブレインサイエンスおよびその関連分野		**94 Oncology, brain sciences, and related fields**	
	腫瘍学およびその関連分野		Oncology and related fields	
	50010	腫瘍生物学関連	50010	Tumor biology-related
	50020	腫瘍診断および治療学関連	50020	Tumor diagnostics and therapeutics-related
	ブレインサイエンスおよびその関連分野		Brain sciences and related fields	
	51010	基盤脳科学関連	51010	Basic brain sciences-related
	51020	認知脳科学関連	51020	Cognitive and brain science-related
	51030	病態神経科学関連	51030	Pathophysiologic neuroscience-related
	95 内科学一般、器官システム内科学、生体情報内科学およびその関連分野		**95 General internal medicine, organ-based internal medicine, internal medicine of the bio-information integration, and related fields**	
	内科学一般およびその関連分野		General internal medicine and related fields	
	52010	内科学一般関連	52010	General internal medicine-related
	52020	神経内科学関連	52020	Neurology-related
	52030	精神神経科学関連	52030	Psychiatry-related
	52040	放射線科学関連	52040	Radiological sciences-related
	52050	胎児医学および小児成育学関連	52050	Embryonic medicine and pediatrics-related
	器官システム内科学およびその関連分野		Organ-based internal medicine and related fields	
	53010	消化器内科学関連	53010	Gastroenterology-related
	53020	循環器内科学関連	53020	Cardiology-related
	53030	呼吸器内科学関連	53030	Respiratory medicine-related
	53040	腎臓内科学関連	53040	Nephrology-related
	53050	皮膚科学関連	53050	Dermatology-related
	生体情報内科学およびその関連分野		Internal medicine of the bio-information integration and related fields	
	54010	血液および腫瘍内科学関連	54010	Hematology and medical oncology-related
	54020	膠原病およびアレルギー内科学関連	54020	Connective tissue disease and allergy-related
	54030	感染症内科学関連	54030	Infectious disease medicine-related
	54040	代謝および内分泌学関連	54040	Metabolism and endocrinology-related
	96 恒常性維持器官の外科学、生体機能および感覚に関する外科学およびその関連分野		**96 Surgery of the organs maintaining homeostasis, surgery related to the biological and sensory functions, and related fields**	
	恒常性維持器官の外科学およびその関連分野		Surgery of the organs maintaining homeostasis and related fields	
	55010	外科学一般および小児外科学関連	55010	General surgery and pediatric surgery-related
	55020	消化器外科学関連	55020	Digestive surgery-related
	55030	心臓血管外科学関連	55030	Cardiovascular surgery-related
	55040	呼吸器外科学関連	55040	Respiratory surgery-related
	55050	麻酔科学関連	55050	Anesthesiology-related
	55060	救急医学関連	55060	Emergency medicine-related
	生体機能および感覚に関する外科学およびその関連分野		Surgery related to the biological and sensory functions and related fields	
	56010	脳神経外科学関連	56010	Neurosurgery-related
	56020	整形外科学関連	56020	Orthopedics-related
	56030	泌尿器科学関連	56030	Urology-related
	56040	産婦人科学関連	56040	Obstetrics and gynecology-related
	56050	耳鼻咽喉科学関連	56050	Otorhinolaryngology-related
	56060	眼科学関連	56060	Ophthalmology-related
	56070	形成外科学関連	56070	Plastic and reconstructive surgery-related
	97 口腔科学およびその関連分野		**97 Oral science and related fields**	
	57010	常態系口腔科学関連	57010	Oral biological science-related
	57020	病態系口腔科学関連	57020	Oral pathobiological science-related
	57030	保存治療系歯学関連	57030	Conservative dentistry-related
	57040	口腔再生医学および歯科医用工学関連	57040	Regenerative dentistry and dental engineering-related
	57050	補綴系歯学関連	57050	Prosthodontics-related
	57060	外科系歯学関連	57060	Surgical dentistry-related
	57070	成長および発育系歯学関連	57070	Developmental dentistry-related
	57080	社会系歯学関連	57080	Social dentistry-related

研究分野・研究内容一覧　Table of Research field/Research content

（注）　※1　中区分の選択の必要がある小区分
※1　Basic Section that should also select Medium-sized Section
※2　研究分野の選択の必要がある小区分
※2　Basic Section that should also select Research field

研究分野 Research field	研究内容（中区分/小区分）		Research content（Medium-sized Section/Basic Section）	
医歯薬学　（続き） **Medicine dentistry and pharmacy** （continued）	**98　社会医学、看護学、スポーツ科学、体育、健康科学およびその関連分野**		**98**	**Society medicine, nursing, sports sciences, physical education, health sciences, and related fields**
	社会医学、看護学およびその関連分野		Society medicine, nursing, and related fields	
	58010	医療管理学および医療系社会学関連	58010	Medical management and medical sociology-related
	58020	衛生学および公衆衛生学分野関連：実験系を含む	58020	Hygiene and public health-related: including laboratory approach
	58030	衛生学および公衆衛生学分野関連：実験系を含まない	58030	Hygiene and public health-related: excluding laboratory approach
	58040	法医学関連	58040	Forensics medicine-related
	58050	基礎看護学関連	58050	Fundamental of nursing-related
	58060	臨床看護学関連	58060	Clinical nursing-related
	58070	生涯発達看護学関連	58070	Lifelong developmental nursing-related
	58080	高齢者看護学および地域看護学関連	58080	Gerontological nursing and community health nursing-related
	スポーツ科学、体育、健康科学およびその関連分野		Sports sciences, physical education, health sciences, and related fields	
	59010	リハビリテーション科学関連	59010	Rehabilitation science-related
	59020	スポーツ科学関連	59020	Sports sciences-related
	59030	体育および身体教育学関連	59030	Physical education, and physical and health education-related
	59040	栄養学および健康科学関連	59040	Nutrition science and health science-related
	90　人間医工学およびその関連分野		**90**	**Biomedical engineering and related fields**
	90110	生体医工学関連　※2	90110	Biomedical engineering-related　※2
	90120	生体材料学関連　※2	90120	Biomaterials-related　※2
	90130	医用システム関連　※2	90130	Medical systems-related　※2
	90140	医療技術評価学関連　※2	90140	Medical technology assessment-related　※2
	90150	医療福祉工学関連　※2	90150	Medical assistive technology-related　※2

Keyword list

Research content (Basic Section)	Examples of related research content	Research content(Medium-sized Sections) and Research field corresponding Research content(Basic Sections)	
		Research content (Medium-sized Section)	Research field
01010	Philosophy and ethics-related Philosophy in general, Ethics in general, Western philosophy, Western ethics, Japanese philosophy, Japanese ethics, Applied ethics, etc.	11	Humanities
01020	Chinese philosophy, Indian philosophy and Buddhist philosophy-related Chinese philosophy/thought, Indian philosophy/thought, Buddhist philosophy, Bibliography, Philology, etc.	11	Humanities
01030	Religious studies-related History of religions, Philosophy of religion, Theology, Sociology of religion, Psychology of religion, Anthropology of religion,Studies of religious folklore, Mythology, Bibliography, Philology, etc.	11	Humanities
01040	History of thought-related History of thought in general, History of Western thought, History of Eastern thought, History of Japanese thought, etc.	11	Humanities
01050	Aesthetics and art studies-related Philosophy of art, Aesthetics, Miscellaneous art studies, etc.	11	Humanities
01060	History of arts-related Japanese art, Eastern art, Western art, Contemporary art, Craft, Design, Architecture, Costume, Photography, etc.	11	Humanities
01070	Theory of art practice-related Art expression, Arts management, Art policy, Art production, etc.	11	Humanities
01080	Sociology of science, history of science and technology-related Sociology of science, History of science, History of technology, History of medicine, Industrial archeology, Philosophy of science, Foundation of science, STS (Science, technology and society), etc.	11	Humanities
02010	Japanese literature-related Japanese literature in general, Ancient literature, Medieval literature, Chinese classics in Japan, Bibliography, Philology, Premodern literature, Modern literature, Contemporary literature, Literary theory, etc.	12	Humanities
02020	Chinese literature-related Chinese literature, Bibliography, Philology, Literary theory, etc.	12	Humanities
02030	English literature and literature in the English language-related English literature, American literature, Literature in the English language, Literary theory, Bibliography, Philology, etc.	12	Humanities
02040	European literature-related French literature, Literature in the French language, German literature, Literature in the German language, Classics, Russian and East European literature, Literature in other European languages, Literary theory, Bibliography, Philology, etc.	12	Humanities
02050	Literature in general-related Literature in other languages and areas, Literary theory, Comparative literature, Bibliography, Philology, Literature education, etc.	12	Humanities
02060	Linguistics-related Phonetics/phonology, Semantics/pragmatics, Morphosyntax, Sociolinguistics, Contrastive linguistics, Psycholinguistics, Neurolinguistics, Historical linguistics, Corpus linguistics, Endangered and minority languages, etc.	12	Humanities

Keyword list

Research content (Basic Section)	Examples of related research content	Research content(Medium-sized Sections) and Research field corresponding Research content(Basic Sections)	
		Research content (Medium-sized Section)	Research field
02070	Japanese linguistics-related Phonetics/phonology, Writing systems, Lexicon and semantics, Grammar, Stylistics, Pragmatics, Language life, Dialect, History of the Japanese language, History of Japanese linguistics, etc.	12	Humanities
02080	English linguistics-related Phonetics/phonology, Lexicon and semantics, Grammar, Stylistics, Pragmatics, Sociolinguistics, Diversity of the English language, Corpus linguistics, History of the English language, History of English linguistics, etc.	12	Humanities
02090	Japanese language education-related Research on learners, Language acquisition, Teaching material, Curriculum evaluation, Japanese language education for specific purposes, Bilingual education, Research on teachers, Japanese language for Japanese language education, History of Japanese language education, Cross-cultural understanding, etc.	12, 25	Humanities, Social sciences
02100	Foreign language education-related Learning method, Computer-assisted language learning (CALL), Teaching material, Language testing, Theory of second language acquisition, Early English education, History of foreign language education and language policies, Curriculum evaluation, Training foreign language teachers, Cross-cultural understanding, etc.	12, 25	Humanities, Social sciences
03010	Historical studies in general-related Historical theory, Historical methodology, Research in historical materials, Memory and medium, World history, History of cultural and diplomatic exchange, Comparative history, etc.	13	Humanities
03020	Japanese history-related Japanese history in general, History of ancient Japan, History of medieval Japan, History of early modern Japan, History of modern Japan, History of local Japan, History of Japanese culture, History of Japanese religion, History of Japanese environment, History of Japanese city, History of cultural and diplomatic exchange, Comparative history, Research in historical materials, etc.	13	Humanities
03030	History of Asia and Africa-related History of pre-modern China, History of modern China, East Asian history, Central Eurasian history, Southeast Asian history, Oceanian history, South Asian history, West Asian history, African history, History of cultural and diplomatic exchange, Comparative history, Research in historical materials, etc.	13	Humanities
03040	History of Europe and America-related Ancient European history, Medieval European history, Modern and contemporary West European history, Modern and contemporary East European history, North and South American history, History of cultural and diplomatic exchange, Comparative history, Research in historical materials, etc.	13	Humanities
03050	Archaeology-related Archaeology in general, Prehistoric archaeology, Historical archaeology, Japanese archaeology, Asian archaeology, Ancient civilizations, History of material culture, Experimental archaeology, Information archaeology, Study of buried cultural property, etc.	13	Humanities

Keyword list

Research content (Basic Section)	Examples of related research content	Research content(Medium-sized Sections) and Research field corresponding Research content(Basic Sections)	
		Research content (Medium-sized Section)	Research field
03060	Cultural assets study-related Dating methods, Material analysis, Production techniques, Conservation science, Archaeological prospection, Plant and animal residues, Human remains, Cultural heritage, Cultural resources, Cultural property policy, etc.	13	Humanities
03070	Museology-related Exhibition studies, Museum pedagogy, Museum informatics, Museum business management, Public finance and administration of museums, Museum material resources, History of museology, etc.	13	Humanities
04010	Geography-related Geography in general, Land use, Landscape, Environmental system, Geomorphology, Climatology, Hydrology, Cartography, Geographic information system, Regional planning, etc.	14	Humanities
04020	Human geography-related Human geography in general, Economic geography, Social geography, Political geography, Cultural geography, Urban geography, Rural geography, Historical geography, Regional geography, Geography education, etc.	14	Humanities
04030	Cultural anthropology and folklore-related Cultural anthropology in general, Folklore in general, Material culture, Ecology, Social relationship, Religion, Arts, Health care, Border crossing, Minority, etc.	14	Humanities
80010	Area studies-related Area studies in general, Cross-regional comparative studies, Aid, International cooperation, Interregional exchange, Environment, Transnationalism, Globalization, Social development, etc.	14, 22	Humanities, Social sciences
80020	Tourism studies-related Tourism studies in general, Tourism, Tourism resources, Tourism policy, Tourism industry, Regional development, Tourists, Pilgrimage, etc.	14, 23, 24	Humanities, Social sciences
80030	Gender studies-related Gender studies in general, Feminism, Sexuality, Queer studies, Labor, Violence, Prostitution, Reproductive technology, Gender equality, etc.	14, 22, 24	Humanities, Social sciences
05010	Legal theory and history-related Legal philosophy, Roman law, Legal history, Sociology of law, Comparative law, Foreign law, Law and policy, Law and economics, Judicial system, etc.	21	Social sciences
05020	Public law-related Constitutional law, Administrative law, Tax law, etc.	21	Social sciences
05030	International law-related Public international law, Private international law, International human rights law, International economic law, EU law, etc.	21	Social sciences
05040	Social law-related Labor law, Economic law, Social security law, Education law, etc.	21	Social sciences
05050	Criminal law-related Criminal law, Criminal procedure, Criminology, Criminal justice policy, Juvenile law, Law and psychology, etc.	21	Social sciences

Keyword list

Research content (Basic Section)	Examples of related research content	Research content(Medium-sized Sections) and Research field corresponding Research content(Basic Sections)	
		Research content (Medium-sized Section)	Research field
05060	Civil law-related Civil law, Commercial law, Civil procedure, Insolvency law, Alternative dispute resolution, etc.	21	Social sciences
05070	New fields of law-related Environmental law, Medical law, Information law, Consumer law, Intellectual property law, Law and gender, Legal profession, etc.	21	Social sciences
06010	Politics-related Political theory, History of political thought, Political history, Japanese political history, Japanese politics, Political process, Electoral studies, Political economy, Public administration, Local government, Comparative politics, Public policy, etc.	22	Social sciences
06020	International relations-related Theory of international relations, Modern international relations, Diplomatic history, International history, Foreign policy, International security, International political economy, Global governance, International cooperation, etc.	22	Social sciences
07010	Economic theory-related Microeconomics, Macroeconomics, Game theory, Behavioral economics, Experimental economics, Economic theory, Evolutionary economics, Economic institutions, Economic systems, etc.	23	Social sciences
07020	Economic doctrines and economic thought-related Economic doctrines, Economic thought, Social thought, Economic philosophy, etc.	23	Social sciences
07030	Economic statistics-related Statistical system, Statistical research, Population statistics, Income/wealth distribution, National accounts, Econometrics, Financial econometrics, etc.	23	Social sciences
07040	Economic policy-related International economics, Industrial organization, Economic development, Urban economics, Regional economy, Environmental and resource economics, Japanese economy, Economic policy, Transportation economics, Development economics, International development, etc.	23	Social sciences
07050	Public economics and labor economics-related Public finance, Public economics, Health economics, Labor economics, Social security, Education economics, Law and economics, Political economy, etc.	23	Social sciences
07060	Money and finance-related Monetary economics, Finance, International finance, Corporate finance, Financial engineering, Insurance, etc.	23	Social sciences
07070	Economic history-related Economic history, Business history, Industrial history, etc.	23	Social sciences
07080	Business administration-related Corporation theory, Organization theory, Organizational behavior, Corporate strategy, Business management, Human resource management, Management of technology, International business, Management information, Industrial management, Management in general, etc.	23	Social sciences

Keyword list

Research content (Basic Section)	Examples of related research content	Research content(Medium-sized Sections) and Research field corresponding Research content(Basic Sections)	
		Research content (Medium-sized Section)	Research field
07090	Commerce-related Marketing, Consumer behavior, Distributive sciences, Logistics, Commerce in general, etc.	23	Social sciences
07100	Accounting-related Financial accounting, Management accounting, Auditing, Accounting in general, etc.	23	Social sciences
08010	Sociology-related Sociology in general, Community, Family, Labor, Sociology of welfare, Gender, Media, Ethnicity, Social movements, Social research, Sociology of medicine, Social demography, etc.	24	Social sciences
08020	Social welfare-related Social work, Social policy, Social welfare history, Child welfare, Social welfare for people with disabilities, Social welfare for aging, Community welfare, Poverty, Volunteerism, Social welfare in general, etc.	24	Social sciences
08030	Family and consumer sciences, and culture and living-related Culture and living, Home economics, Consumer affairs, Lifestyle, Culture of clothing, Culture of food, Culture of dwelling, Dress and fashion, Diet habits, Housing, Family and consumer sciences in general, Family and consumer education, etc.	24	Social sciences
09010	Education-related History of education, Philosophy of education, Curriculum and pedagogy, Evaluation of education, Teacher and trainer, School education, Social and community education, Vocational education and training, Lifelong learning, Institutions and administration, etc.	25	Social sciences
09020	Sociology of education-related Sociology of education, Socialization, Educational organization and system, Destination and career formation, Class disparities, Gender, Education policy, Comparative education, Globalization and development, etc.	25	Social sciences
09030	Childhood and nursery/pre-school education-related Childhood, Nursery/pre-school education, Right of child, Development, Contents and methods of child care, Childcare facilities and kindergarten, Caregiver and pre-school teacher, Child care support, Childhood culture, History and thought, etc.	25	Social sciences
09040	Education on school subjects and primary/secondary education-related Education of individual subjects, Education excluding subjects, Student guidance and counselling, Career education, School management, Teacher education, ESD, Environmental education, Literacy, etc.	25	Social sciences
09050	Tertiary education-related Policy, Admission and articulation, Curriculum, Career guidance, Teacher and staff, Scientific research, Regional link and contribution, Globalization, Management and governance, Non-university higher education, etc.	25	Social sciences
09060	Special needs education-related Philosophy and history, Inclusion and cohesive society, Instructions and supports, Developmental disabilities, Emotional disturbance, Intellectual disabilities, Language disorders, Physical disabilities, Career education, etc.	25	Social sciences

Keyword list

Research content (Basic Section)	Examples of related research content	Research content(Medium-sized Sections) and Research field corresponding Research content(Basic Sections)	
		Research content (Medium-sized Section)	Research field
09070	Educational technology-related Curriculum development, Teaching-learning support systems, Utilization of media, Utilization of ICT, Teacher's education, Information literacy, etc.	25	Social sciences
09080	Science education-related Science education, Science communication, Scientific literacy, Science and society, etc.	25	Social sciences
10010	Social psychology-related Social psychology in general, Self, Group, Attitude and behavior, Affection/emotion, Interpersonal relation, Social issues, Culture, etc.	26	Social sciences
10020	Educational psychology-related Educational psychology in general, Development, Family, School, Clinical practice, Personality, Learning, Assessment and evaluation, etc.	26	Social sciences
10030	Clinical psychology-related Clinical psychology in general, Psychological disorder, Assessment, Psychological intervention, Training, Mental health, Crime and delinquency, Community, etc.	26	Social sciences
10040	Experimental psychology-related Experimental psychology in general, Sensation, Perception, Attention, Memory, Language, Emotion, Learning, etc.	26	Social sciences
11010	Algebra-related Group theory, Ring theory, Representation theory, Algebraic combinatorics, Number theory, Arithmetic geometry, Algebraic geometry, Algebraic analysis, etc.	31	Mathematical and physical sciences
11020	Geometry-related Differential geometry, Riemannian geometry, Symplectic geometry, Complex geometry, Topology, Differential topology, Low dimensional topology, etc.	31	Mathematical and physical sciences
12010	Basic analysis-related Functional analysis, Complex analysis, Probability theory, Harmonic analysis, Operator theory, Spectral analysis, Operator algebras, Algebraic analysis, Representation theory, etc.	32	Mathematical and physical sciences
12020	Mathematical analysis-related Functional equations, Real analysis, Dynamical system, Variational method, Nonlinear analysis, Applied analysis, etc.	32	Mathematical and physical sciences
12030	Basic mathematics-related Mathematical logic and foundations, Information theory, Discrete mathematics, Computer mathematics, etc.	32	Mathematical and physical sciences
12040	Applied mathematics and statistics-related Numerical analysis, Mathematical modelling, Optimal control, Game theory, Statistical mathematics, etc.	32	Mathematical and physical sciences

Keyword list

Research content (Basic Section)	Examples of related research content	Research content(Medium-sized Sections) and Research field corresponding Research content(Basic Sections)	
		Research content (Medium-sized Section)	Research field
13010	Mathematical physics and fundamental theory of condensed matter physics-related Statistical physics, Fundamental theory of condensed matter physics, Mathematical physics, Nonequilibrium nonlinear physics, Fluid dynamics, Computational physics, Quantum information theory, etc.	33	Mathematical and physical sciences
13020	Semiconductors, optical properties of condensed matter and atomic physics-related Semiconductors, Dielectrics, Atoms and molecules, Mesoscopic systems, Crystals, Surfaces and interfaces, Optical properties of condensed matter, Quantum electronics, Quantum information, etc.	33	Mathematical and physical sciences
13030	Magnetism, superconductivity and strongly correlated systems-related Magnetism, Strongly correlated electron systems, Superconductivity, Quantum fluids and solids, Molecular solids, etc.	33	Mathematical and physical sciences
13040	Biophysics, chemical physics and soft matter physics-related Physics of biological phenomena, Physics of biological matters, Liquids and glasses, Soft matters, Rheology, etc.	33	Mathematical and physical sciences
14010	Fundamental plasma-related Basic plasmas, Magnetized plasmas, Laser plasmas, Strongly coupled plasmas, Plasma diagnostics, Astrophysical and space plasmas, etc.	34	Mathematical and physical sciences
14020	Nuclear fusion-related Plasma confinement, Plasma control, Plasma heating, Plasma diagnostics, Edge plasma, Plasma wall interaction, Inertial fusion, Fusion material, Fusion system, etc.	34	Mathematical and physical sciences
14030	Applied plasma science-related Plasma processing, Plasma photonics, Plasma material science, General plasma applications, etc.	34	Mathematical and physical sciences
80040	Quantum beam science-related Accelerators, Beam physics, Radiation detectors, Beam control, Applied quantum beam science, etc.	34, 35	Mathematical and physical sciences
15010	Theoretical studies related to particle-, nuclear-, cosmic ray and astro-physics Particle physics, Nuclear physics, Cosmic-ray physics, Astrophysics, Relativity, Gravity, etc.	35	Mathematical and physical sciences
15020	Experimental studies related to particle-, nuclear-, cosmic ray and astro-physics Particle physics, Nuclear physics, Cosmic-ray physics, Astrophysics, Relativity, Gravity, etc.	35	Mathematical and physical sciences
16010	Astronomy-related Optical/infrared astronomy, Radio astronomy, Solar physics, Astrometry, Theoretical astronomy, X-ray/γ-ray astronomy, etc.	36	Mathematical and physical sciences
17010	Space and planetary sciences-related Solar-terrestrial physics, Aeronomy, Planetary science, Exoplanetary science, Extraterrestrial material science, etc.	37	Mathematical and physical sciences
17020	Atmospheric and hydrospheric sciences-related Climate system, Atmospheric science, Ocean science, Limnology, Glaciology, Paleoclimatology, etc.	37	Mathematical and physical sciences
17030	Human geosciences-related Geoenvironmental science, Natural disaster science, Geospatial information science, Quaternary research, Earth resources science, etc.	37	Mathematical and physical sciences

Keyword list

Research content (Basic Section)	Examples of related research content	Research content(Medium-sized Sections) and Research field corresponding Research content(Basic Sections)	
		Research content (Medium-sized Section)	Research field
17040	Solid earth sciences-related Solid earth geophysics, Geology, Earth's interior material science, Solid earth geochemistry, etc.	37	Mathematical and physical sciences
17050	Biogeosciences-related Origin and evolution of life, Extremophile biology, Biogeochemistry, Paleoenvironmental science, Paleontology, etc.	37	Mathematical and physical sciences
32010	Fundamental physical chemistry-related Theoretical chemistry, Molecular spectroscopy, Structural chemistry, Electronic state dynamics, Chemical reaction dynamics, Surface/interface, Cluster and nano materials, Bio-related physical chemistry, Liquid structure dynamics, Solid state properties, Molecular properties, etc.	41	Chemistry
32020	Functional solid state chemistry-related Optical properties, Electron spin, Molecular electronics and devices, Supermolecules, Liquid crystals, Crystals, Surface/interface, Nano particles, Colloids, Electrochemistry, Electronic properties, etc.	41	Chemistry
34010	Inorganic/coordination chemistry-related Coordination chemistry, Organometallic chemistry, Inorganic solid-state chemistry, Bioinorganic chemistry, Solution chemistry, Clusters, Supramolecular complexes, Coordination polymers, Typical elements, Physical properties and functions, etc.	41	Chemistry
34020	Analytical chemistry-related Spectrometric analysis, Advanced measurements, Surface/interface analysis, Separation analysis, Analytical reagents, Radiochemical analysis, Electrochemical analysis, Bioanalysis, New analysis methods, etc.	41	Chemistry
34030	Green sustainable chemistry and environmental chemistry-related Green process, Green catalysts, Recycle, Environmental assessment, Environmentally conscious materials, Reduction of environmental load, Environmental restoration, Resource saving, Geochemistry, Environmental radioactivity, etc.	41	Chemistry
36010	Inorganic compounds and inorganic materials chemistry-related Crystals, Amorphous, Ceramics, Semiconductors, Inorganic device-related materials, Low-dimensional compounds, Porous materials, Nanoparticles, Multicomponent compounds, Hybrid materials, etc.	41	Chemistry
36020	Energy-related chemistry Energy resources, Energy conversion materials, Energy carriers, Solar energy utilization, Material separation, Catalytic transformation, Battery and electrochemical materials, Energy-saving materials, Renewable energy, Unused energy, etc.	41	Chemistry
33010	Structural organic chemistry and physical organic chemistry-related Organic crystals, Molecular recognition, Supermolecules, Organic functional materials, Extended π-electron system compounds, Heterocyclic chemistry, Organoelement chemistry, Organic reaction mechanism, Organic photochemistry, Theoretical organic chemistry, etc.	42	Chemistry
33020	Synthetic organic chemistry-related Selective reactions, Asymmetric synthesis, Organometallic complex/catalysis, Catalyst design, Organocatalysts, Biocatalysis, Sustainable organic synthesis, Natural product synthesis, Process chemistry, Organic electrochemistry, etc.	42	Chemistry
35010	Polymer chemistry-related Polymer synthesis, Polymer reactions, Precision polymerization, Functional polymers, Self-assembled polymers, Chiral polymers, Bio-related polymers, Polymer properties, Polymer structures, Polymer thin film/surface, etc.	42	Chemistry

Keyword list

Research content (Basic Section)	Examples of related research content	Research content(Medium-sized Sections) and Research field corresponding Research content(Basic Sections)	
		Research content (Medium-sized Section)	Research field
35020	Polymer materials-related Properties of polymer materials, Synthesis of polymer materials, Functional polymer materials, Liquid crystal polymers, Textiles, Rubbers, Gel, Biopolymers, Polymer composites, Polymer processing, etc.	42	Chemistry
35030	Organic functional materials-related Organic semiconductors, Liquid crystals, Optical materials, Device-related materials, Electrically conductive materials, Hybrid materials, Molecular functional materials, Organic hybrid materials, Materials for energy conversion, etc.	42	Chemistry
37010	Bio-related chemistry Bioorganic chemistry, Bioinorganic chemistry, Biological reaction engineering, Biofunctional chemistry, Biofunctional materials, Biotechnology, etc.	42	Chemistry
37020	Chemistry and chemical methodology of biomolecules-related Natural product chemistry, Biologically active compounds, Molecular mechanism of biological activities, Biofunctional molecules, Combinatorial chemistry, Metabolomic analysis, etc.	42	Chemistry
37030	Chemical biology-related In vivo functional expression, Intracellular chemical reactions, Drug discovery science, Chemical library, Structure-activity relationship, Chemical probes, Biomolecular measurements, Molecular imaging, Proteomics, etc.	42	Chemistry
18010	Mechanics of materials and materials-related Structural mechanics, Fatigue, Fracture, Biomaterials, Material design, Material characteristics, Material evaluation, etc.	51	Engineering sciences
18020	Manufacturing and production engineering-related Machine tools, Machining, Non-traditional machining, Ultraprecision machining, Additive manufacturing, Precision metrology, Manufacturing systems, Computer-aided technology, Process planning, etc.	51	Engineering sciences
18030	Design engineering-related Product design, Service design, Design for reliability, Maintainability design, Lifecycle engineering, Reverse engineering, Safety design, Design engineering, etc.	51	Engineering sciences
18040	Machine elements and tribology-related Machine elements, Mechanisms, Tribology, Actuators, Micromachines, etc.	51	Engineering sciences
31010	Nuclear engineering-related Reactor physics and safety design, Thermal-hydraulics and structure, Fuel material, Nuclear chemistry, Nuclear life cycle, Radiation safety, Radiation beam engineering, Plasma engineering for fusion reactor, Equipment and material engineering for fusion reactor, Nuclear social environment, etc.	51	Engineering sciences
31020	Earth resource engineering, Energy sciences-related Earth resource sciences, Resource prospecting, Resource development, Resource cycle, Resource economy, Energy system, Environmental load evaluation, Renewable energy, Natural resource and energy technological policy, etc.	51	Engineering sciences
19010	Fluid engineering-related Fluid machinery, Flow measurement, Computational fluid dynamics, Turbulence, Multiphase flow, Compressible flow, Incompressible flow, etc.	51	Engineering sciences

Keyword list

Research content (Basic Section)	Examples of related research content	Research content(Medium-sized Sections) and Research field corresponding Research content(Basic Sections)	
		Research content (Medium-sized Section)	Research field
19020	Thermal engineering-related Heat transfer, Convection, Combustion, Thermophysical properties, Refrigeration and air-conditioning, Heat engine, Energy conversion, etc.	51	Engineering sciences
20010	Mechanics and mechatronics-related Kinematics, Kinetics, Vibration, Acoustics, Automation, Learning control, Mechatronics, Micro/nano mechatronics, Biomechanics, etc.	51	Engineering sciences
20020	Robotics and intelligent system-related Robotics, Intelligent system, Human mechanical system, Human interface, Planning, Intelligent spatial system, Virtual reality, Augmented reality, etc.	51	Engineering sciences
24010	Aerospace engineering-related Thermo-fluid dynamics, Structural strength, Propulsion, Aerospace craft design, Production engineering, Aircraft system, Specific aircraft, Aerodynamics, Spacecraft system, Space utilization, etc.	51	Engineering sciences
24020	Marine engineering-related Navigation, Structural mechanics, Structural design, Production technology, Marine propulsion, Marine transport, Marine development engineering, Underwater engineering, Polar engineering, Marine environmental technology, etc.	51	Engineering sciences
21010	Power engineering-related Electrical energy-related, Energy conservation, Power system engineering, Electric machinery, Power electronics, Effective utilization of electric energy, Electromagnetic compatibility, etc.	52	Engineering sciences
21020	Communication and network engineering-related Information theory, Nonlinear theory, Signal processing, Wired/wireless communication systems, Modulation/demodulation, Antennas, Networks, Multimedia, Cryptography/security, etc.	52	Engineering sciences
21030	Measurement engineering-related Measurement theory, Measuring instruments, Applied wave metrology, Measurement systems, Signal processing, Sensing devices, etc.	52	Engineering sciences
21040	Control and system engineering-related Control theory, System theory, Control systems, Knowledge-based control systems, System information processing, System control applications, Biosystems engineering, etc.	52	Engineering sciences
21050	Electric and electronic materials-related Semiconductor, Dielectric materials, Magnetic materials, Organic materials, Superconductor, Composite materials, Thin films, Quantum structures, Thick films, Fabrication/characterization methods, etc.	52	Engineering sciences
21060	Electron device and electronic equipment-related Electron devices, Circuit design, Optical devices, Spintronic devices, Millimeter wave/terahertz wave, Applied wave devices, Storage devices, Displays, Micro fabrication process technology, Implementation technology, etc.	52	Engineering sciences
29010	Applied physical properties-related Magnetic materials, Superconductors, Dielectrics, Fine particles, Organic molecules, Liquid crystals, New functional materials, Organic molecules and bioelectronics, Spintronics, etc.	52	Engineering sciences
29020	Thin film/surface and interfacial physical properties-related Thin-film engineering, Thin-film electronics, Oxide electronics, Vacuum, Surface science, Analysis, Measurement, Nanoscopic technology, Surface and interfacial engineering, Advanced equipment, etc.	52	Engineering sciences

Keyword list

Research content (Basic Section)	Examples of related research content	Research content(Medium-sized Sections) and Research field corresponding Research content(Basic Sections)	
		Research content (Medium-sized Section)	Research field
29030	Applied condensed matter physics-related Elementary quantities, Standards, Units, Physical quantity measurements and detection, Energy conversion, etc.	52	Engineering sciences
30010	Crystal engineering-related Metals, Semiconductors, Ceramics, Amorphous materials, Crystal growth, Artificial structures, Crystal characterization, Plasma materials engineering, Plasma processing, Plasma engineering, etc.	52	Engineering sciences
30020	Optical engineering and photon science-related Optical materials, Optical elements, Optical properties, Optical information processing, Laser, Optical sensing, Optical recording, Opto-electronics, Nonlinear optics, Vision optics, etc.	52	Engineering sciences
22010	Civil engineering material, execution and construction management-related Concrete, Steel, Composite material, Wood, Pavement material, Repair and reinforce material, Execution, Maintenance, Construction management, Underground space, etc.	53	Engineering sciences
22020	Structure engineering and earthquake engineering-related Applied mechanics, Structure engineering, Steel structure, Concrete structure, Composite structure, Wind engineering, Earthquake engineering, Aseismatic structure, Earthquake prevention, etc.	53	Engineering sciences
22030	Geotechnical engineering-related Soil mechanics, Foundation engineering, Rock engineering, Engineering Geology, Ground behavior, Soil structure, Geo-disaster prevention, Geoenvironmental engineering, Tunnel engineering, Soil environment, etc.	53	Engineering sciences
22040	Hydroengineering-related Hydraulics, Environmental hydraulics, Hydrology, River engineering, Water resource engineering, Coastal engineering, Port and harbor engineering, Ocean engineering, etc.	53	Engineering sciences
22050	Civil engineering plan and transportation engineering-related Civil engineering plan, Regional urban planning, Spatial planning, Disaster prevention plan, Transportation plan, Transportation engineering, Railway engineering, Surveying and remote sensing, Landscape design, Civil engineering history, etc.	53	Engineering sciences
22060	Environmental systems for civil engineering-related Environment plan, Environmental system, Environment conservation, Water serve and drainage systems, Waste, Water environment, Atmospheric circulation, Noise and vibration, Environment ecology, Environmental monitoring, etc.	53	Engineering sciences
25010	Social systems engineering-related Social systems, Industrial engineering, Operations research, Industrial management, Reliability engineering, Policy science, Regulatory science, Quality control, etc.	53	Engineering sciences
25020	Safety engineering-related Safety engineering, Safety system, Risk engineering, Risk management, Work safety, Product safety, Safety information, Human engineering, Liability engineering, etc.	53	Engineering sciences
25030	Disaster prevention engineering-related Disaster prediction, Hazard map, Building prevention against disaster, Lifeline prevention against disaster, Regional disaster prevention planning, Risk evaluation of disaster, Disaster prevention policy, Disaster resilience, etc.	53	Engineering sciences
23010	Building structures and materials-related Load theory, Structural analysis, Structural design, Structures, Earthquake resistant design, Foundation, Geotechnics, Structural material, Maintenance, Building construction method, etc.	53	Engineering sciences

Keyword list

Research content (Basic Section)	Examples of related research content	Research content(Medium-sized Sections) and Research field corresponding Research content(Basic Sections)	
		Research content (Medium-sized Section)	Research field
23020	Architectural environment and building equipment-related Sound environment, Vibration environment, Light environment, Heat environment, Air environment, Environmental psychology/physiology, Building equipment, Fire engineering, Urban environment, Environment design, etc.	53	Engineering sciences
23030	Architectural planning and city planning-related Planning theory, Design theory, Housing theory, Buildings, Urban/regional planning, Administration, Building economics, Production management, Disaster prevention planning, Landscape, etc.	53	Engineering sciences
23040	Architectural history and design-related Architectural history, Urban history, Architectural theory, Design, Landscape, Preservation, Renovation, etc.	53	Engineering sciences
26010	Metallic material properties-related Electric and magnetic properties, Electronic information properties, Metastable states, Diffusion, Phase transformation, Phase diagram, Crystal lattice defects, Mechanical properties, Thermal and optical properties, Materials computational science, etc.	54	Engineering sciences
26020	Inorganic materials and properties-related Functional ceramics, Functional glasses, Structural ceramics, Carbon-based materials, Crystal structure analysis, Microstructure control, Electric properties, Mechanical properties, Physical and chemical properties, Grain boundary, etc.	54	Engineering sciences
26030	Composite materials and interfaces-related Functional composite materials, Structural composite materials, Biocompatible composite materials, Polymer composite, Surface treatment, Dispersion control, Joining and welding, Adhesive bonding, Interface properties, Gradient function, etc.	54	Engineering sciences
26040	Structural materials and functional materials-related Social infrastructure materials, Toughness, Medical welfare materials, Functional polymer materials, Reliability, Photo-functional materials, Sensor materials, Energy materials, Battery functional materials, Environment functional materials, etc.	54	Engineering sciences
26050	Material processing and microstructure control-related Processing and molding, Thermal treatment, Crystal microstructure control, Laser processing, Precision processing, Polishing, Powder metallurgy, Coatings, Metal plating, Corrosion and protection, etc.	54	Engineering sciences
26060	Metals production and resources production-related Separation and purification, Melting and solidifying, Crystal growth, Casting, Resource security reservation, Scarce resources substitution, Low environment impact, Recycle, Ecomaterials, Energy saving, etc.	54	Engineering sciences
27010	Transport phenomena and unit operations-related Phase equilibrium, Transport properties, Momentum/heat/mass transfer, Fluid-phase unit operation, Adsorption, Membrane separation, Mixing, Powder technology, Crystallization, Film formation, etc.	54	Engineering sciences
27020	Chemical reaction and process system engineering-related Reaction operation, Novel reaction process, Reaction mechanism, Reactor design, Materials synthesis process, Micro-chemical process, Process control, Process system design, Process informatics, etc.	54	Engineering sciences

Keyword list

Research content (Basic Section)	Examples of related research content	Research content(Medium-sized Sections) and Research field corresponding Research content(Basic Sections)	
		Research content (Medium-sized Section)	Research field
27030	Catalyst and resource chemical process-related Catalysis, Catalyst preparation, Catalytic function, Energy conversion process, Energy development, Energy-saving technology, Resources effective utilization technology, etc.	54	Engineering sciences
27040	Biofunction and bioprocess engineering-related Biocatalyst engineering, Biofunction engineering, Food engineering, Medicochemical engineering, Bioproduction process, Nano-bioprocess, Bioreactor, Bioseparation, Biosensor, Biorefinery, etc.	54	Engineering sciences
28010	Nanometer-scale chemistry-related Nanostructure creation, Clusters, Nanoparticles, Mesoscopic chemistry, Superstructures, Nanometer-scale surfaces and interfaces, Self-assembly, Nanocarbons, Molecular devices, Nanometer-scale optical devices, etc.	54	Engineering sciences
28020	Nanostructural physics-related Physics in nanoscale materials and structures, Nanoprobes, Quantum effects, Quantum dots, Quantum devices, Electron devices, Spin devices, Nanotribology, Nanocarbon physics, etc.	54	Engineering sciences
28030	Nanomaterials-related Creation of nanomaterials, Analysis of nanomaterials, Nanosurfaces, Nanointerfaces, Functional nanomaterials, Nanostructures, Nanoparticles, Carbon nanomaterials, Nanocrystalline materials, Nanocomposites, Nanodefects, Nanofabrication process, etc.	54	Engineering sciences
28040	Nanobioscience-related Biomolecular devices, Molecular manipulation, Molecular imaging, Nanomeasurements, Nanosynthesis, Single molecule science, Nano-bio interfaces, Biomolecular array, Genome engineering, etc.	54	Engineering sciences
28050	Nano/micro-systems-related MEMS, NEMS, BioMEMS, Nano/micro-fabrication, Nano/micro-optical devices, Nano/micro-chemical systems, Nano/micro-biosystems, Nano/micro-organism systems, Nano/micro-mechanics, Nano/micro-sensors, etc.	54	Engineering sciences
60010	Theory of informatics-related Discrete structure, Mathematical logic, Theory of computation, Mathematical theory of programs, Computational complexity theory, Algorithm theory, Information theory, Coding theory, Theory of cryptography, Learning theory, etc.	61	Informatics
60020	Mathematical informatics-related Optimization theory, Mathematical systems theory, System control theory, System analysis, System methodology, System modeling, System simulation, Combinatorial optimization, Queueing theory, Mathematical finance, etc.	61	Informatics
60030	Statistical science-related Statistics, Data science, Modeling, Statistical inference, Multivariate analysis, Time series analysis, Statistical quality control, Applied statistics, etc.	61	Informatics
60040	Computer system-related Computer architecture, Circuit and system, LSI design, LSI testing, Reconfigurable system, Dependable architecture, Low power technology, Hardware/software codesign, Embedded system, etc.	61	Informatics
60050	Software-related Programming language, Programming methodology, Operating system, Parallel and distributed computing, Software engineering, Virtualization technology, Cloud computing, Software dependability, Software security, etc.	61	Informatics

Keyword list

Research content (Basic Section)	Examples of related research content	Research content(Medium-sized Sections) and Research field corresponding Research content(Basic Sections)	
		Research content (Medium-sized Section)	Research field
60060	Information network-related Network architecture, Network protocol, Internet, Mobile network, Pervasive computing, Sensor network, IoT, Traffic engineering, Network management, Service platform technology, etc.	61	Informatics
60070	Information security-related Cryptography, Tamper resistance technology, Authentication, Biometrics, Access control, Malware countermeasure, Countermeasures against denial-of-service attacks, Privacy protection, Digital forensics, Security evaluation and authorization, etc.	61	Informatics
60080	Database-related Data model, Database system, Multimedia database, Information retrieval, Content management, Metadata, Big data, Geographic information system, etc.	61	Informatics
60090	High performance computing-related Parallel processing, Distributed processing, Cloud computing, Numerical analysis, Visualization, Computer graphics, High performance computing application, etc.	61	Informatics
60100	Computational science-related Mathematical engineering, Computational mechanics, Numerical simulation, Multi-scale modeling, Large-scale computing, Massively parallel computing, Numerical computing methods, Advanced algorithms, etc.	61	Informatics
62010	Life, health and medical informatics-related Bioinformatics, Life informatics, Biological information, Neuroinformatics, Neural information processing, Molecular computing, DNA computing, Medical information, Health information, Medical image, etc.	61	Informatics
62020	Web informatics and service informatics-related Web system, Social web, Semantic web, Web mining, Social network analysis, Service engineering, Educational service, Medical service, Welfare service, Social service, Information culture, etc.	61	Informatics
62030	Learning support system-related Media literacy, Learning media, Social media, Learning content, Learning management, Learning support, Remote learning, e-Learning, etc.	61	Informatics
62040	Entertainment and game informatics-related Music information processing, 3D content, Animation, Game programming, Network entertainment, Media art, Digital museum, Experience design, etc.	61	Informatics
61010	Perceptual information processing-related Pattern recognition, Image processing, Computer vision, Visual media processing, Acoustic media processing, Media editing, Media database, Sensing, Sensor fusion, etc.	62	Informatics
61020	Human interface and interaction-related Human interface, Multi-modal interface, Human-computer interaction, Computer supported cooperative work, Virtual reality, Augmented reality, Realistic communication, Wearable device, Usability, Ergonomics, etc.	62	Informatics
61030	Intelligent informatics-related Search, Inference, Machine learning, Knowledge acquisition, Intelligent system, Intelligent information processing, Natural language processing, Data mining, Ontology, Agent system, etc.	62	Informatics

Keyword list

Research content (Basic Section)	Examples of related research content	Research content(Medium-sized Sections) and Research field corresponding Research content(Basic Sections)	
		Research content (Medium-sized Section)	Research field
61040	Soft computing-related Neural network, Evolutionary computation, Fuzzy theory, Chaos, Complex systems, Probabilistic information processing, etc.	62	Informatics
61050	Intelligent robotics-related Intelligent robot, Behavior and environment recognition, Planning, Sensory behavior system, Autonomous system, Digital human, Real world information processing, Physical agents, Intelligent space, etc.	62	Informatics
61060	Kansei informatics-related Kansei design, Kansei cognitive science, Kansei psychology, Kansei robotics, Kansei measurement evaluation, Kansei interface, Kansei physiology, Kansei material science, Kansei pedagogy, Kansei brain science, etc.	62	Informatics
43010	Molecular biology-related Chromosome function, Chromatin, Epigenetics, Genome maintenance, Genome transmission, Chromosome re-organization, Gene expression, Non-coding RNA, Regulation of protein function, Molecular genetics, etc.	71	Biological sciences
43020	Structural biochemistry-related Proteins, Nucleic acids, Lipids, Carbohydrates, Biological membrane, Molecular recognition, Denaturation, Three-dimensional structural analysis, Three-dimensional structural prediction, Molecular dynamics, etc.	71	Biological sciences
43030	Functional biochemistry-related Enzymes, Sugar chain, Bioenergy conversion, Biological trace elements, Physiologically active substances, Cell signaling, Membrane transport, Proteolysis, Molecular recognition, etc.	71	Biological sciences
43040	Biophysics-related Structure biology, Physical property of biomolecules, Biomembrane, Photobiology, Molecular motor, Biometrics, Bioimaging, Systems biology, Synthetic biology, Theoretical biology, etc.	71	Biological sciences
43050	Genome biology-related Genome organization, Genome function, Genome diversity, Molecular evolution of genome, Genome repair/maintenance, Trans-omics, Epigenome, Gene resource, Genome dynamics, etc.	71	Biological sciences
43060	System genome science-related Network analyses, Synthetic biology, Biological databases, Bioinformatics, Genome analysis technology, Genome biotechnology, etc.	71	Biological sciences
44010	Cell biology-related Cytoskeleton, Proteolysis, Organelle dynamics, Nuclear structure and function, Extracellular matrix, Signal transduction, Cell cycle, Cell motility, Cell-cell interaction, Cellular genetics, etc.	72	Biological sciences
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.	72	Biological sciences

Keyword list

Research content (Basic Section)	Examples of related research content	Research content(Medium-sized Sections) and Research field corresponding Research content(Basic Sections)	
		Research content (Medium-sized Section)	Research field
44030	Plant molecular biology and physiology-related Photosynthesis, Growth physiology, Plant development, Organelle, Cell wall, Responses to environment, Plant-microbe interaction, Metabolism, Plant molecular function, etc.	72	Biological sciences
44040	Morphology and anatomical structure-related Animal and plant morphology, Micro-organismal morphology, Molecular morphology, Microstructure, Tissue organization, Morphogenesis, Comparative endocrinology, Microscopic technology, Imaging, etc.	72	Biological sciences
44050	Animal physiological chemistry, physiology and behavioral biology-related Metabolic physiology, Neurophysiology, Neuroethology, Behavioral physiology, Animal physiological chemistry, Chronobiology, Comparative physiology, etc.	72	Biological sciences
45010	Genetics-related Genetic mechanism, Molecular genetics, Cellular genetics, Population genetics, Evolutionary genetics, Developmental genetics, Behavioral genetics, Genetic diversity, etc.	73	Biological sciences
45020	Evolutionary biology-related General evolutionary biology, Molecular evolution, Phenotypic evolution, Evolution of developmental traits, Evolution of ecological traits, Evolution of behaviors, Experimental evolution, Evolutionary theory, Evolution of symbiosis, Phylogenetics, Speciation, etc.	73	Biological sciences
45030	Biodiversity and systematics-related Taxonomic characters, Taxon, Classification system, Biodiversity, Phylogenetics, Evolution, Natural history, Speciation, etc.	73	Biological sciences
45040	Ecology and environment-related Chemical ecology, Molecular ecology, Physiological ecology, Evolutionary ecology, Behavioral ecology, Population ecology, Community ecology, Ecosystem, Conservation ecology, Natural environment, etc.	73	Biological sciences
45050	Physical anthropology-related Molecular anthropology and genetics, Morphology and function, Bioarchaeology, Behavior and cognition, Ecology, Primates, Evolution, Development and ontogeny, Variation and diversity, etc.	73	Biological sciences
45060	Applied anthropology-related Physiological anthropology, Ergonomics, Forensic anthropology, Medical anthropology, Physiological polymorphisms, Environmental adaptability, Somatic and physiological function, Anthropometry and bioengineering, etc.	73	Biological sciences
46010	Neuroscience-general-related Neurochemistry, Neuron, Glia, Genome, Epigenetics, Neurobiology, Information processing, Synapse, Neurogenesis, etc.	74	Biological sciences
46020	Anatomy and histopathology of nervous system-related Neural development, Anatomy of nervous system, Neural network structure, Neuropathology, etc.	74	Biological sciences
46030	Function of nervous system-related Neurophysiology, Neuropharmacology, Neurotransmission, Neuroinformatics, Behavioral neuroscience, Neural system physiology, Cerebral blood flow, Autonomic nervous system, etc.	74	Biological sciences

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Research content (Basic Section)	Examples of related research content	Research content(Medium-sized Sections) and Research field corresponding Research content(Basic Sections)	
		Research content (Medium-sized Section)	Research field
38010	Plant nutrition and soil science-related Plant metabolism and physiology, Nutritional elements in plants, Soil classification, Soil physical chemistry, Soil organisms, etc.	81	Agriculture/Environmental sciences
38020	Applied microbiology-related Microbial genetics/breeding, Microbial function, Microbial metabolism and physiology, Microbial applications, Control of microbes, Microbial ecology, Production of useful materials, etc.	81	Agriculture/Environmental sciences
38030	Applied biochemistry-related Cellular biochemistry, Applied biochemistry, Structural biology, Regulation of bioactivity, Metabolism and physiology, Cellular function, Molecular function, Production of useful materials, etc.	81	Agriculture/Environmental sciences
38040	Bioorganic chemistry-related Bioactive substances, Signal molecules, Natural products chemistry, Biosynthesis, Structure-activity relationship, Synthetic organic chemistry, Chemical biology, etc.	81	Agriculture/Environmental sciences
38050	Food sciences-related Food function, Food chemistry, Nutritional chemistry, Food analysis, Food engineering, Food safety, Functional food, Nutritional epidemiology, Clinical nutrition, etc.	81	Agriculture/Environmental sciences
38060	Applied molecular and cellular biology-related Molecular cell biology, Cellular bioengineering, Molecular engineering, Gene expression control, Cell-cell/intermolecular interactions, Cellular function, Production of useful materials, etc.	81	Agriculture/Environmental sciences
39010	Science in plant genetics and breeding-related Genetic resources, Breeding theories, Genomic breeding, Plants with novel traits, Quality components, Stress tolerance, Yielding ability, Reproduction and multiplication, Growth physiology, Development, etc.	82	Agriculture/Environmental sciences
39020	Crop production science-related Field crops, Crop yield, Crop product quality, Crop morphology, Growth prediction, Crop physiology, Field management, Low-cost cultivation techniques, Environmentally friendly agriculture, Field ecosystem, etc.	82	Agriculture/Environmental sciences
39030	Horticultural science-related Plant growth, flowering, and fruit development, Nursery plant propagation and production, Crop production systems, Cultivation techniques, Protected horticulture, Controlled environment systems, Breeding and development of new cultivars, Quality of horticultural products, Postharvest physiology and management, Socio-horticulture, etc.	82	Agriculture/Environmental sciences
39040	Plant protection science-related Plant pathology, Clinical plant science, Agricultural insect pest, Natural enemy, Weed, Agricultural chemicals, Integrated pest management, etc.	82	Agriculture/Environmental sciences
39050	Insect science-related Sericulture insect technology, Insect genetics, Insect pathology, Insect physiology and biochemistry, Insect ecology, Chemical ecology, Systematics, Symbiosis and parasitism, Social insects, Medical entomology, etc.	82	Agriculture/Environmental sciences
39060	Conservation of biological resources-related Conservation biology, Biodiversity conservation, Conservation of phylogenetic diversity, Conservation of genetic resources, Ecosystem conservation, Conservation of endemic species, Conservation of microorganisms, etc.	82	Agriculture/Environmental sciences

Keyword list

Research content (Basic Section)	Examples of related research content	Research content(Medium-sized Sections) and Research field corresponding Research content(Basic Sections)	
		Research content (Medium-sized Section)	Research field
39070	Landscape science-related Landscape architecture, Parks and open space planning, Landscape planning, Cultural landscape, Nature conservation, Landscape ecology, Parks and open space management, Parks, Environmental greening, Participatory community design, etc.	82	Agriculture/Environmental sciences
41010	Agricultural and food economics-related Food economy, Agricultural production economy, Policy for agriculture, forestry and fishery, Food system, Food marketing, International agricultural development, Trade of agricultural commodities and livestock products, Rural resources and environment, etc.	82	Agriculture/Environmental sciences
41020	Rural sociology and agricultural structure-related Farm organization, Farm management, Agricultural structure, Agricultural market, Agricultural history, Rural society, Rural life, Agricultural cooperative, etc.	82	Agriculture/Environmental sciences
41030	Rural environmental engineering and planning-related Irrigation and drainage, Reclamation and conservation of agricultural land, Rural planning, Rural environment, Circulation of resources and energy, Disaster prevention in rural area, Stock management of agricultural infrastructures, Hydrodynamics and hydrology, Soil physics, Design and construction materials, etc.	82	Agriculture/Environmental sciences
41040	Agricultural environmental engineering and agricultural information engineering-related Agricultural production facilities, Bioproduction machinery, Environmental control, Agricultural meteorology and micrometeorology, Agricultural information, Greenhouse horticulture, Plant factory, Postharvest and supply chain, Nondestructive measurement, Remote sensing and geographic information system, etc.	82	Agriculture/Environmental sciences
41050	Environmental agriculture-related Biomass, Environmental manipulation, Biodiversity, Environmental analysis, Ecosystem services, Resources circulation system, Low-carbon societies, Life-cycle assessment, Environmental friendly agriculture, Watershed management, etc.	82	Agriculture/Environmental sciences
40010	Forest science-related Forest ecology, Forest biodiversity, Forest genetics and breeding, Silviculture, Forest protection, Forest environments, Erosion control, Forest planning, Forest policy, etc.	83	Agriculture/Environmental sciences
40020	Wood science-related Wood structure, Wood property, Lignocellulose, Trace element, Fungus, Wood processing, Biomass-refinery, Wood based material, Wooden building, Forest products education, etc.	83	Agriculture/Environmental sciences
40030	Aquatic bioproduction science-related Aquatic environment, Fisheries, Aquatic resource management, Aquatic organisms, Aquatic ecosystem, Aquaculture, Fisheries engineering, Fishing community/fisheries policy, Fisheries economics/management/marketing, Fisheries education, etc.	83	Agriculture/Environmental sciences
40040	Aquatic life science-related Aquatic nutrition, Aquatic pathology, Aquatic genetics/heredity/breeding, Aquatic physiology, Utilization of aquatic organisms and biomass, Aquatic biological chemistry, Aquatic biotechnology, Aquatic food sciences, etc.	83	Agriculture/Environmental sciences

Keyword list

Research content (Basic Section)	Examples of related research content	Research content(Medium-sized Sections) and Research field corresponding Research content(Basic Sections)	
		Research content (Medium-sized Section)	Research field
42010	Animal production science-related Breeding/genetics, Reproduction, Nutrition/feeding, Anatomy/physiology, Product, Environment, Behavior, Therapy, Grassland, Grazing, etc.	84	Agriculture/Environmental sciences
42020	Veterinary medical science-related Basic veterinary science, Pathological veterinary science, Applied veterinary science, Clinical veterinary science, Animal nursing, Animal welfare, Wildlife, etc.	84	Agriculture/Environmental sciences
42030	Animal life science-related Homeostasis, Cellular function, Biological defense, Integrated genetics, Development/differentiation, Biotechnology, etc.	84	Agriculture/Environmental sciences
42040	Laboratory animal science-related Genetic engineering, Developmental engineering, Animal models of disease, Facility management, Laboratory animal welfare, Laboratory animal-related technology, Bioresource, etc.	84	Agriculture/Environmental sciences
63010	Environmental dynamic analysis-related Global warming, Environmental change, Water and material cycle, Polar regions, Chemical oceanography, Biological oceanography, Environmental measurements, Environmental model, Environmental information, Remote sensing, etc.	85	Agriculture/Environmental sciences
63020	Radiation influence-related Radiation, Measurement, Control, Repair, Biological effects, Risk, etc.	85	Agriculture/Environmental sciences
63030	Chemical substance influence on environment-related Toxicology, Toxic substance to human, Trace chemical substance, Endocrine disruptor, Repair, etc.	85	Agriculture/Environmental sciences
63040	Environmental impact assessment-related Atmosphere, Hydrosphere, Terrestrial impact, Impact assessment on human health, Social and economic impacts, Impact assessment on the future generation, Environmental impact assessment, Assessment methods, Monitoring, Simulation, etc.	85	Agriculture/Environmental sciences
64010	Environmental load and risk assessment-related Environmental analysis, Environmental load analysis, Environmental monitoring, Dynamics of environmental pollution, Environmental modelling, Evaluation of contamination, Exposure assessment, Toxicity evaluation, Environmental assessment, Chemical substance management, etc.	85	Agriculture/Environmental sciences
64020	Environmental load reduction and remediation-related Removal of contamination, Treatment of waste material, Control of contamination source, Disposal of waste material, E nvironmental load reduction, Remediation measure of contamination, Noise and vibration reduction, Countermeasure of ground settlement, Bioremediation, Radioactive decontamination, etc.	85	Agriculture/Environmental sciences
64030	Environmental materials and recycle technology-related Recycle materials, Valuable materials recovery, Separation, refining and purification, Environment-conscious design, Recycle chemistry, Green production, Zero emission, Resource circulation, Renewable energy, Biomass utilization, etc.	85	Agriculture/Environmental sciences
64040	Social-ecological systems-related Biodiversity, Conservation biology, Ecosystem services, Natural capital, Impact analysis on ecosystem, Ecosystem management, Ecosystem restoration, Ecological engineering, Regional environmental planning, Impact of climate change, etc.	85	Agriculture/Environmental sciences

Keyword list

Research content (Basic Section)	Examples of related research content	Research content(Medium-sized Sections) and Research field corresponding Research content(Basic Sections)	
		Research content (Medium-sized Section)	Research field
64050	Sound material-cycle social systems-related Sound material-cycle systems, Material and energy budget analysis, Low carbon society, Unused energy, Regional revitalization, Water use system, Industrial symbiosis, Life cycle assessment (LCA), Integrated environmental management, 3R (reduction, reuse, recycle) social systems, etc.	85	Agriculture/Environmental sciences
64060	Environmental policy and social systems-related Environmental philosophy and ethics, Environmental laws, Environmental economics, Environmental information, Environmental education, Environmental social activities, Environmental management and governance, Consensus forming, Environmental safety and security, Social and public system, Sustainable development, etc.	85	Agriculture/Environmental sciences
47010	Pharmaceutical chemistry and drug development sciences-related Inorganic chemistry, Organic chemistry, Medicinal chemistry, Medicinal molecular design, Drug discovery, Bio-related materials, Chemical biology, etc.	91	Medicine dentistry and pharmacy
47020	Pharmaceutical analytical chemistry and physicochemistry-related Environmental analysis, Bioanalysis, Physicochemistry, Biophysics, Structural biology, Radiochemistry, Bioimaging, Drug formulation design, Computer science, Information science, etc.	91	Medicine dentistry and pharmacy
47030	Pharmaceutical hygiene and biochemistry-related Environmental hygiene, Healthful nutrition, Disease prevention, Toxicology, Drug metabolism, Host defense, Molecular biology, Cell biology, Biochemistry, etc.	91	Medicine dentistry and pharmacy
47040	Pharmacology-related(A) Pharmacology, Pharmacogenomics, Applied pharmacology, Signal transduction, Drug interactions, Drug response, Pharmacotherapy, Pharmacotoxicology, etc.	91	Medicine dentistry and pharmacy
47050	Environmental and natural pharmaceutical resources-related Environmental resource science, Natural products chemistry, Bioactive natural compounds, Medicinal resources, Medicinal foods, Pharmaceutical microbiology, etc.	91	Medicine dentistry and pharmacy
47060	Clinical pharmacy-related Pharmacokinetics, Medical informatics, Social pharmacy, Clinical pharmacy, Pharmaceutics, Regulatory science, Education for the pharmacist, etc.	91	Medicine dentistry and pharmacy
48010	Anatomy-related Macroscopic anatomy, Histology, Embryology, etc.	92	Medicine dentistry and pharmacy
48020	Physiology-related General physiology, Pathophysiology, Comparative physiology, Environmental physiology, etc.	92	Medicine dentistry and pharmacy
48030	Pharmacology-related(B) Genomic pharmacology, Molecular and cellular pharmacology, Pathological pharmacology, Behavioral pharmacology, Pharmacology for drug discovery, Clinical pharmacology, etc.	92	Medicine dentistry and pharmacy
48040	Medical biochemistry-related Biofunctional molecular and medical biochemistry, Genome medical sciences, Human genetics, Disease model, etc.	92	Medicine dentistry and pharmacy

Keyword list

Research content (Basic Section)	Examples of related research content	Research content(Medium-sized Sections) and Research field corresponding Research content(Basic Sections)	
		Research content (Medium-sized Section)	Research field
49010	Pathological biochemistry-related Molecular pathology, Metabolic disorders, Molecular diagnosis, etc.	93	Medicine dentistry and pharmacy
49020	Human pathology-related Molecular pathology, Cyto- and histo-pathology, Diagnostic pathology, etc.	93	Medicine dentistry and pharmacy
49030	Experimental pathology-related Disease models, Pathological regulation, Tissue regeneration, etc.	93	Medicine dentistry and pharmacy
49040	Parasitology-related Parasite, Vector organism, Parasite pathogenicity, Epidemiology of parasites, Control of parasite infections, etc.	93	Medicine dentistry and pharmacy
49050	Bacteriology-related Bacterium, Fungus, Antimicrobial resistance, Bacterial pathogenicity, Epidemiology of bacteria, Control of bacterial infections, etc.	93	Medicine dentistry and pharmacy
49060	Virology-related Virus, Prion, Viral pathogenicity, Epidemiology of viruses, Control of viral infections, etc.	93	Medicine dentistry and pharmacy
49070	Immunology-related Immune system, Immune response, Inflammation, Immune-related disorder, Immune regulation, etc.	93	Medicine dentistry and pharmacy
50010	Tumor biology-related Cancer and gene, Tumor development, Invasion, Metastasis, Cancer microenvironment, Cancer and signal transduction, Characteristics of cancer cells, etc.	94	Medicine dentistry and pharmacy
50020	Tumor diagnostics and therapeutics-related Genome analysis, Diagnostic markers, Molecule imaging, Chemotherapy, Nucleic acid therapy, Gene therapy, Immunotherapy, Molecular targeted therapy, Physical therapy, Radiation therapy, etc.	94	Medicine dentistry and pharmacy
51010	Basic brain sciences-related Brain-machine interface, Model animal, Computational brain science, Brain information decoding, Control technologies, Brain imaging, Brain biometrics, etc.	94	Medicine dentistry and pharmacy
51020	Cognitive and brain science-related Social behavior, Communication, Emotion, Decision making, Consciousness, Learning, Neuroeconomics, Neuropsychology, etc.	94	Medicine dentistry and pharmacy
51030	Pathophysiologic neuroscience-related Clinical neuroscience, Dolorology, Sensory impairment, Movement disorder, Neurological disorder, Neurogenesis, Neuroimmunology, Cellular degeneration, Disease model, etc.	94	Medicine dentistry and pharmacy

Keyword list

Research content (Basic Section)	Examples of related research content	Research content(Medium-sized Sections) and Research field corresponding Research content(Basic Sections)	
		Research content (Medium-sized Section)	Research field
52010	General internal medicine-related Laboratory medicine, General practice, Geriatrics, Psychosomatic internal medicine, Oriental medicine, Palliative medicine, etc.	95	Medicine dentistry and pharmacy
52020	Neurology-related Neurology, Neurofunctional imaging, etc.	95	Medicine dentistry and pharmacy
52030	Psychiatry-related Clinical psychiatry, Biological psychiatry, Forensic mental health, etc.	95	Medicine dentistry and pharmacy
52040	Radiological sciences-related Diagnostic radiology, Therapeutic radiology, Radiation biology, Radiological technology, etc.	95	Medicine dentistry and pharmacy
52050	Embryonic medicine and pediatrics-related Fetal medicine, Neonatal medicine, Pediatrics, etc.	95	Medicine dentistry and pharmacy
53010	Gastroenterology-related Upper digestive tract, Lower digestive tract, Liver, Biliary tract, Pancreas, etc.	95	Medicine dentistry and pharmacy
53020	Cardiology-related Ischemic heart disease, Valvular heart disease, Arrhythmia, Cardiomyopathy, Heart failure, Peripheral arterial disease, Arteriosclerosis, Hypertension, etc.	95	Medicine dentistry and pharmacy
53030	Respiratory medicine-related Respiratory medicine, Asthma, Diffusive lung disease, COPD, Lung cancer, Pulmonary hypertension, etc.	95	Medicine dentistry and pharmacy
53040	Nephrology-related Acute renal failure, Chronic kidney disease, Diabetic nephropathy, Hypertension, Aqueous electrolyte metabolism, Artificial dialysis, etc.	95	Medicine dentistry and pharmacy
53050	Dermatology-related Dermatology, Cutaneous immune disease, Cutaneous infection, Cutaneous tumor, etc.	95	Medicine dentistry and pharmacy
54010	Hematology and medical oncology-related Hematological oncology, Hematological immunology, Anemia, Thrombosis and hemostasis, Chemotherapy, etc.	95	Medicine dentistry and pharmacy
54020	Connective tissue disease and allergy-related Connective tissue disease, Allergy, Clinical immunology, Inflammation, etc.	95	Medicine dentistry and pharmacy
54030	Infectious disease medicine-related Infection diagnostics, Infection therapeutics, Host defense, International infection science, etc.	95	Medicine dentistry and pharmacy
54040	Metabolism and endocrinology-related Energy balance, Glucose metabolism, Lipid metabolism, Purine metabolism, Bone metabolism, Electrolyte balance, Endocrinology, Neuroendocrinology, Reproductive endocrinology, etc.	95	Medicine dentistry and pharmacy

Keyword list

Research content (Basic Section)	Examples of related research content	Research content(Medium-sized Sections) and Research field corresponding Research content(Basic Sections)	
		Research content (Medium-sized Section)	Research field
55010	General surgery and pediatric surgery-related Surgical basic principles, Breast surgery, Endocrine surgery, Pediatric surgery, Transplant surgery, Artificial organs science, Regeneration, Operation support, etc.	96	Medicine dentistry and pharmacy
55020	Digestive surgery-related Upper gastrointestinal surgery, Lower gastrointestinal surgery, Hepatic surgery, Biliary surgery, Pancreatic surgery, etc.	96	Medicine dentistry and pharmacy
55030	Cardiovascular surgery-related Coronary artery surgery, Heart valve surgery, Surgery for myocardial disease, Aortic surgery, Vascular surgery, Congenital heart surgery, etc.	96	Medicine dentistry and pharmacy
55040	Respiratory surgery-related Lung surgery, Mediastinal surgery, Chest wall surgery, Respiratory tract surgery, etc.	96	Medicine dentistry and pharmacy
55050	Anesthesiology-related Anesthesiology, Perioperative management, Pain management, Resuscitology, Palliative medicine, etc.	96	Medicine dentistry and pharmacy
55060	Emergency medicine-related Intensive care medicine, Emergency resuscitation science, Trauma surgery, Disaster medicine, Disaster medical care, etc.	96	Medicine dentistry and pharmacy
56010	Neurosurgery-related Neurosurgery, Spine and spinal cord diseases, etc.	96	Medicine dentistry and pharmacy
56020	Orthopedics-related Orthopedics, Rehabilitation medicine, Sports medicine, etc.	96	Medicine dentistry and pharmacy
56030	Urology-related Urology, Male genitalia science, etc.	96	Medicine dentistry and pharmacy
56040	Obstetrics and gynecology-related Obstetrics, Reproductive endocrinology, Gynecologic oncology, Female health care medicine, etc.	96	Medicine dentistry and pharmacy
56050	Otorhinolaryngology-related Otorhinolaryngology, Head and neck surgery, etc.	96	Medicine dentistry and pharmacy
56060	Ophthalmology-related Ophthalmology, Ophthalmological optics, etc.	96	Medicine dentistry and pharmacy
56070	Plastic and reconstructive surgery-related Plastic surgery, Reconstructive surgery, Aesthetic plastic surgery, etc.	96	Medicine dentistry and pharmacy

Keyword list

Research content (Basic Section)	Examples of related research content	Research content(Medium-sized Sections) and Research field corresponding Research content(Basic Sections)	
		Research content (Medium-sized Section)	Research field
57010	Oral biological science-related Oral anatomy, Oral histology and embryology, Oral physiology, Oral biochemistry, Pharmacology for hard tissues, etc.	97	Medicine dentistry and pharmacy
57020	Oral pathobiological science-related Oral infectious diseases, Oral pathology, Oral experimental oncology, Immunity and inflammation, Laboratory medicine, etc.	97	Medicine dentistry and pharmacy
57030	Conservative dentistry-related Operative dentistry, Endodontology, Periodontology, etc.	97	Medicine dentistry and pharmacy
57040	Regenerative dentistry and dental engineering-related Regenerative dentistry, Biomaterial science, Dental materials science, Oral and maxillofacial prosthetics, Oral implantology, etc.	97	Medicine dentistry and pharmacy
57050	Prosthodontics-related Prosthodontics, Oral rehabilitation, Gerodontology, etc.	97	Medicine dentistry and pharmacy
57060	Surgical dentistry-related Oral and maxillofacial surgery, Oral maxillofacial reconstructive surgery, Dental anesthesiology, Psychosomatic medicine dentistry, Dental radiology, etc.	97	Medicine dentistry and pharmacy
57070	Developmental dentistry-related Orthodontics, Pediatric dentistry, etc.	97	Medicine dentistry and pharmacy
57080	Social dentistry-related Dental hygiene, Preventive dentistry, Oral health administration and management, Dental education, Forensic odontology, etc.	97	Medicine dentistry and pharmacy
58010	Medical management and medical sociology-related Medical management, Medical social science, Ethics for medical science, Ethics for medical care, Biomedical education, History of medical science, Health policy and economics, Clinical trials, Health and medical services administration, Disaster medical science, etc.	98	Medicine dentistry and pharmacy
58020	Hygiene and public health-related: including laboratory approach Hygiene, Public health, Epidemiology, Global health, etc.	98	Medicine dentistry and pharmacy
58030	Hygiene and public health-related: excluding laboratory approach Hygiene, Public health, Epidemiology, Global health, etc.	98	Medicine dentistry and pharmacy
58040	Forensics medicine-related Forensic medicine, Forensic pathology, Forensic toxicology, Forensic genetics, Suicide, Abuse, Clinical forensic medicine, Sudden death, etc.	98	Medicine dentistry and pharmacy
58050	Fundamental of nursing-related Fundamental of nursing, Nursing education, Nursing administration, etc.	98	Medicine dentistry and pharmacy

Keyword list

Research content (Basic Section)	Examples of related research content	Research content(Medium-sized Sections) and Research field corresponding Research content(Basic Sections)	
		Research content (Medium-sized Section)	Research field
58060	Clinical nursing-related Critical care and emergency nursing, Perioperative nursing, Nursing of chronic illness, Oncology nursing, Psychiatric nursing, Palliative care nursing, etc.	98	Medicine dentistry and pharmacy
58070	Lifelong developmental nursing-related Women's health nursing, Maternal nursing, Midwifery, Family health nursing, Child health nursing, School nursing, etc.	98	Medicine dentistry and pharmacy
58080	Gerontological nursing and community health nursing-related Gerontological nursing, Community health nursing, Public health nursing, Disaster nursing, etc.	98	Medicine dentistry and pharmacy
59010	Rehabilitation science-related Rehabilitation medicine, Rehabilitation nursing, Rehabilitation medical care, Physicotherapeutics, Occupational therapy, Assistive technology, Speech and language therapy, etc.	98	Medicine dentistry and pharmacy
59020	Sports sciences-related Sports physiology, Sports biochemistry, Sports medicine, Sports sociology, Sports management, Sports psychology, Sports education, Training science, Sports biomechanics, Adapted sports science, Doping, etc.	98	Medicine dentistry and pharmacy
59030	Physical education, and physical and health education-related Growth developmental science, Physical and health education, Physical education in school, Educational physiology, Physical systems science, Higher brain function science, Martial arts theory, Outdoor education, etc.	98	Medicine dentistry and pharmacy
59040	Nutrition science and health science-related Nutritional physiology, Nutritional biochemistry, Nutritional education, Clinical nutrition, Functional food, Lifestyle-related disease, Health promotion, Aging, etc.	98	Medicine dentistry and pharmacy
90010	Design-related Information design, Environmental design, Industrial design, Spatial design, Design history, Theory of design, Design standard, Design support, Evaluation of design, Design education, etc.	11,53, 62	Humanities, Engineering sciences, Informatics
90020	Library and information science, humanistic and social informatics-related Library science, Information services, Information organizing, Information retrieval, Information media, Bibliometrics, Information resources, Information ethics, Digital humanities, Social Informatics, Digital archives, etc.	12, 61	Humanities, Informatics
90030	Cognitive science-related Cognitive science in general, Cognitive models, Kansei, Human factors, Cognitive and brain science, Comparative cognition, Cognitive linguistics, Cognitive engineering, etc.	26, 62	Social sciences, Informatics
90110	Biomedical engineering-related Medical imaging, Medical modeling, Biological simulation, Biometrics, Artificial organs, Tissue engineering, Biophysical properties, Biocontrol, Biomechanics, Nanobio systems, etc.	90	Engineering sciences, Medicine dentistry and pharmacy
90120	Biomaterials-related Biofunctional materials, Tissue engineering materials, Biocompatible materials, Nanobio materials, Drug delivery systems, Stimuli-sensitive materials, Genetic engineering material, etc.	90	Engineering sciences, Medicine dentistry and pharmacy
90130	Medical systems-related Medical ultrasound system, Diagnostic imaging system, Laboratory diagnosis systems, Minimally invasive treatment systems, Remote diagnosis and treatment systems, Organ preservation systems, Medical information systems, Computer-assisted surgery, Medical robot, etc.	90	Engineering sciences, Medicine dentistry and pharmacy

Keyword list

Research content (Basic Section)	Examples of related research content	Research content(Medium-sized Sections) and Research field corresponding Research content(Basic Sections)	
		Research content (Medium-sized Section)	Research field
90140	Medical technology assessment-related Regulatory science, Safety evaluation, Clinical study, Medical technology ethics, Medical devices, etc.	90	Engineering sciences, Medicine dentistry and
90150	Medical assistive technology-related Healthcare and rehabilitation engineering, Life assist technology, Care support technology, Accessibility design, Universal design, Rehabilitation and nursing robot, Assist device for artificial internal organ, Rehabilitation devices, Nursing science and engineering, etc.	90	Engineering sciences, Medicine dentistry and pharmacy

FY2021

Leading Initiative for Excellent Young Researchers

Review Guidelines

Science and Technology Policy Bureau, MEXT

April 2021

1. Review System

The neutral official institution, the Japan Society for the Promotion of Science (hereinafter "JSPS"), supports the MEXT by establishing the Selection Committee for EYR candidates (hereinafter the "Selection Committee") which consists of experts for reviewing the Leading Initiative for Excellent Young Researchers FY2021, and is delegated to review for selecting the EYR candidates (hereinafter, the "Candidates").
The review is conducted to select the Candidates through document screening by the Selection Committee members (hereinafter the "Committee Member(s)".
MEXT will decide the candidates based on the results of document screening by the Committee Members.

2. Review Method

The review is conducted in the following methods per field set in consideration of posts offered by research institutions, and the research area of an applicant researcher (hereinafter, the "Applicant").

(1) Document screening
- Based on "3. Review Perspectives" below, the Committee Members conduct screening of the application documents (Researcher Form 1 (including the Attachment) and Researcher Form 2) submitted by applicants.

(2) Determination of the EYR Candidates
- Based on results of the screening by the Committee Members, MEXT determines the EYR candidates.
- Overseas research experience, the diversity (research area, gender, etc.) of EYR candidates, the number of posts offered for each research area, and the number of applicants may be considered when the candidates are selected.

3. Review Perspectives

Major review perspectives are as follows:

1) The person is expected to be a good research leader who will play important roles in Japanese science and technology, academic researches and science technology innovation in the future.
2) The person has world-class research abilities and can be expected to develop a new research

or technology area, etc. (His/her overseas research experience will be taken into consideration.)

3) The purpose of research and research plan are good in a concrete and precise manner.

4) The person is highly motivated and flexible enough to succeed in an industry-academia-government research institution.

4. Others

(1) Disclosure/nondisclosure of the review

- Documents required for reviewing by the Committee Members will not be disclosed.
- No inquiries about the contents and development of the review will be responded to.
- The names of Committee Members will be disclosed only after the expiry of their terms.

(2) Matters to be observed by the Committee Members

1) Excluding the interested parties

- The Committee Member who has vested interest with the applicant will report the fact to the JSPS, saying he/she cannot join the review of the applicant. The member shall not join the review.

<Scope of interest>

- An applicant having a family relationship with the Committee Member
- The Committee Member currently holds an office as a full-time or part-time officer, staff, or teacher in the research institution the applicant belong to (including a scheduled one)
- The Committee Member determines for himself/herself that it is difficult to review in a neutral and fair manner

2) Confidentiality

- The Committee Member shall not leak any personal information acquired in the course of review and the information related to the details of reviewing the applicant. In addition, the information a Committee Member obtains, including various materials such as application documents, must be strictly managed.

Enter into the electronic application system to create this form.

(Researcher Form 1)

Leading Initiative for Excellent Young Researchers FY2021 Application Form

Receipt Number				
Field	Research field		Basic Section code	
	Medium-sized Section			
	Basic Section			
	Specialized research field			

Keywords	

Name (for display)			
Nationality		Gender	
Date of birth			
Contact (E-mail)			
researchmap			

Current affiliation	Name of institution		
	Institution type		
	Location	Postal code:	
	Name of department/section		
	Position	Employment status	

Academic background for PhD	Academic status	
	Graduate school	
	Faculty	
	Major	
	Completed/ withdrawn YYYY/MM	
	Degree awarded date	
	Degree name	
Enrolled in the medical field which requires clinical training		

Research/job history	

Research interruption due to childbirth/child care	
Research interruption period due to childbirth/child care	

Institution type of interest regarding negotiation among the parties (Up to three)	☐ University ☐ Inter-University Research Institute Corporation ☐ College of technology ☐ National Research and Development Agency ☐ Public Research and Development Institute ☐ Company etc.

Other information to register

The items entered hereinafter are not used for screening nor displayed in documents that provide information to the institutions.

Institution type of first choice	

Name (name on the family register)		
Current address	Postal code:	
	Tel:	Cell phone:

*It is possible to change the current address (contact E-mail) after submitting the application form, however, it will not be reflected in the PDF file created at the time of submission of the application form.

Agreement upon application
Please read the following notes before applying.

1) Please check if you do not agree to provide your information to the research institutions which offered the publicized posts at the time your application has been accepted. In addition, if you are selected as an Excellent Young Researcher Candidate, your name etc. will be listed on the "EYR Candidates list" and your information will be provided to the institutions. The information provided to the institutions is Form 1 and Form 1 Attachment.

   ☐ I do not agree to provide my information to the institutions at the time my application has been accepted.

2) Please check the box if you do not agree to provide your information to the agencies supporting negotiation among the parties at the time the agencies will be decided, after your application has been accepted. In addition, if you are selected as an Excellent Young Researcher Candidate, your name etc. will be listed on the "EYR Candidates list" and your information will be provided to the agencies. The information provided to the agencies supporting negotiation among the parties is Researcher Form 1, Form 1 Attachment, and "Institution type of first choice." Please confirm and agree to the conditions before filing the application.

   ☐ I do not agree to provide my information to the support agencies at the time the agencies will be decided after my application has been accepted.
   ☐ I agree to provide my information to the support agencies if I am selected as an Excellent

Young Researcher candidate.

3) Before filing the application, please make sure you read the "Application Guidelines for FY 2021 Leading Initiatives for Excellent Young Researchers." If major errors, omissions and the like are identified after the application is filed, the determination as an Excellent Young Researcher Candidate or as an Excellent Young Researcher may be revoked. Please confirm and agree to the conditions before filing the application.

☐ I read the "Application Guidelines for FY 2021 Leading Initiatives for Excellent Young Researchers" and understood the contents.
*As for handling of personal information, please refer to the Application Guidelines "V. Points to be considered (16) Handling of personal information" .

☐ I confirmed that there are no errors in the application above or attached separately.

(Researcher Form 1 Attachment)

Leading Initiative for Excellent Young Researchers FY 2021 Application Outline

1. Please describe the outline of your research contents in the Researcher Form 2, “Research theme that you want to address as an EYR.”

Research contents

2. Freely describe the points you would like to highlight about yourself to the research institution (your previous and future attitudes and stances toward research, experiences in research, qualification and skills, equipment you can use, your future direction as a research leader, and career vision). You may also describe the place where you wish to work, your motivation for doing research in another field, and your research records so far as necessary.

Points highlighted

This page will be provided to the research institutions and the agencies supporting negotiation among the parties as part of the applicant information. Therefore, please do not include confidential information that cannot be disclosed. Changes to the form or page additions are not allowed.

(Researcher Form 2)

Research Plan for Leading Initiative for Excellent Young Researchers FY 2021

1) Research theme you want to address as an EYR

<Research purpose/content (such as setting of research agenda and awareness of the issues)>

In this column, please describe the specific purpose and its contents of the overall concept of the research that you want to conduct in a concrete and precise manner. Focus especially on the following points and describe them in a clear and detailed manner.

- Academic or social background of research (domestic and foreign trends and positions relating to this research, circumstances leading to the idea, setting of research agenda and awareness of the issues)
- The core of the problem and how you will clarify it.
- Setting of research agenda and awareness of the issues as a background of this research. Expected research achievements. New research areas which can be developed based on these achievements. The contents when utilizing and developing the results of research so far in other fields and industries or socially.

*The research content of EYR will be adjusted with the research institute that offered the post in negotiation among the parties and it is not a promise that the EYR can definitely engage in the research described in this column.

*Changes of the form and page additions are not allowed.

[Research purposes/contents]

[Research purposes/content (continued)]

1) Research theme you want to address as an EYR

<Research plan/method>

In this column, please describe the concrete research plan and method to achieve your research goal assuming the most recent 2 years. Describe them in a concrete and precise manner especially focusing on the following points.

1) Concrete ideas in carrying out this research (uniqueness, creativity, novelty, etc. of the idea in conducting research)
2) Concept of the research system assumed as the laboratory director (What kind of system do you assume to conduct research, such as the arrangement of postdoctoral fellows and graduate students, etc.? In case of a company, what kind of team and system do you assume as a project manager in order to conduct research?)

*****Changes of the form and page additions are not allowed.

[Research plan/method]

[Research plan/method (continued)]

2) Potential of becoming a successful leader at various research institutions

<My potential of becoming successful at various institutions, my strengths>

In this column, describe evidences and your own episodes that support your assertion to become a successful research leader such as research director and project manager who can excel beyond the boundaries of institutions, sectors and countries and be attractive to respective institutions.

*Changes of the form and page additions are not allowed.

[Evidences and episodes supporting your potential as a successful research leader]

[Evidences and episodes supporting your potential as a successful research leader] (continued)

3) Achievements

< 3 significant achievements, career events, experiences, etc.)>

In this column, describe three significant achievements, career events, experiences, etc. since 2016 related to your potential to be successful in the envisaged research concept and at various research institutions. Please describe briefly in accordance with the following points. If you describe papers that are contributing to an academic journal, please note that papers which have already been decided to be published can only be listed.

(Examples)

1) In the case of papers published, describe the paper title, author name, name of the journal the paper was published in, presence or absence of peer review, volume, the first and last pages and the year of publication (AD). If the above items are listed, the order of items can be changed. If there are many authors, entering several main authors and omitting others (if you omit them, enter the number of members omitted and the order listed) is allowed. In this case, underline the name of the applicant.
2) Describe the dates (such as year and date) and contents of career and experiences at various research institutions, such as work experience as a researcher at an organization (corporations, public research organizations, etc.) other than the university or Inter-University Research Institute Corporations, experiences of internship for 3 months or more, or research experience by belonging to an overseas research institution (including university) for 3 months or more.

*Changes of the form and page additions are not allowed.

[3 significant achievements, career events, experiences, etc.]

[3 significant achievements, career events, experiences, etc. (continued)]

3) Achievements

<List of other achievements, career events, experiences, etc.>

Describe important achievements, career events, experiences, etc. related to the research concept by numbering the year of publication serially from the present to the past focusing on the achievements since 2016. For those three described as the significant achievements, career events, experiences, etc. in the previous pages, circle the corresponding number.

*Changes of the form and page additions are not allowed.

[Other achievements, career events and experiences]

(Example of description
*The composition of the description item can be changed. Please delete here when describing.)

(1) Papers published in academic journals, etc. (including bulletins / collection of papers) and books

1) Taro Gakushin, Hanako Hanzomon, …… '(Title) ,' " (Name of Journal which carries the article), " ○○ publishing company, No. , pp57－62, 2019
2) Jiro Kojimachi, Taro Gakushin …… '(Title),' "(Name of Journal which carries the article)," ○○ publishing company, No., pp33－39,2018
3) Hanako Hanzomon, Jiro Kojimachi, Taro Gakushin (the sixth), ○○○○, ○○○○, ○○○○, ○○○○, Saburo Chiyoda (○omitted), '(Title),' "(Name of Journal which carries the article)," ○○ publishing company, No., pp10－25, 2017

(2) Commentary and review article in academic journals or commercial magazines

1) Taro Gakushin …… '(Title),' "Name of Journal which carries the article," ○○ publishing company, No. , pp57－62, 2019

(3) Presentation at an international conference

1) ○Gakushin T, Hanzomon H, …'(Title） ,' "(Name of meeting)," BB-11, Los Angeles, USA, (June 2018)

(4) Presentation at a domestic meeting/symposium

○Taro Gakushin, Hanako Hanzo… '(Title),' "(Name of meeting)," No.200, Sendai, September 2018

(5) Patents

1) (Patent Number), '(Title),' Jiro Kojimachi, Taro Gakushin, April 2018

(6) Others (Awards received etc.)

1) Taro Gakushin … '(Name of award),' April 2018

[Other achievements, career events, experiences, etc. (Continued)]

(Researcher Form 3)

Declination by the Excellent Young Researcher Candidate

Date (MM/DD/YYYY):

Attn: Director-General, Science and Technology Policy Bureau, Ministry of Education, Culture, Sports, Science and Technology

Current (government) post:

Name in *hiragana:*

Name:

I had applied for the FY2021 Leading Initiative for Excellent Young Researchers and was selected as an Excellent Young Researcher candidate. However, I have decided to decline the offer and hereby notify the decision.

**The name column should have the "name" or "signature."*

**A foreign national, etc. should write his or her name in alphabet in the name column and leave the name in* hiragana *column blank.*

**If this form is submitted, you will no longer be able to apply for the continuation of your candidate eligibility from the following fiscal year onward.*