I. Outline of the Grants-in-Aid for Scientific Research - KAKENHI

1. Purpose and Character of Grants-in-Aid for Scientific Research - KAKENHI

Grants-in-Aid for Scientific Research are competitive funds that are intended to significantly develop all scientific research (research based on the free ideas of the researcher), from basic to applied research in all fields, ranging from the humanities and the social sciences to the natural sciences. The grants provide financial support for creative and pioneering research projects that will become the foundation of social development. The research projects are selected using a peer-review screening process (screening by multiple researchers whose field of specialization is close to that of the applicant).

The position of "KAKENHI" in the policy on the promotion of science, technology and scientific research in Japan



2. Research Categories

Depending on the content and the scale of the research, different research categories have been established.

Research categories, etc. Purposes and description of the research category	
Grants-in-Aid for Scientific Research	
Grant-in-Aid for Specially Promoted Research	Highly regarded research in the international arena that is likely to yield highly acclaimed research achievements and is done by one researcher or by a relatively small group of researchers. (The period is three to five years. As a general indicator, the upper limit of the total budget provided is set around 500 million yen per research project. However, no upper and lower limits have been established.)
Scientific Research on Innovative Areas	(Research in a proposed research area) New research areas that will lead to the upgrading and enhancement of scientific research in Japan. The new research areas are proposed by one researcher or by a group of researchers, and will develop through the effort to cultivate collective research, research personnel, etc. (The period is five years. In principle, the budget is set at around 10 million to 300 million yen per fiscal year per field.)
Scientific Research	 (S) Creative/pioneering research done by one researcher or a relatively small group of researchers (The period is five years. The budget ranges from 50 million yen to around 200 million yen per project.) (A)(B)(C) Creative/pioneering research done by one researcher or jointly by multiple researchers (The period is three to five years.) (A) From 20 million to 50 million yen (Classified in A, B or C, depending on the total budget provided) (B) From 5 million yen to 20 million yen
Challenging Exploratory Research	Early-stage research that has a research plan organized by one or multiple researchers, that is based on a unique concept, that is challenging, and that sets a high goal (The period is one to three years. The budget is up to 5 million yen per project.) \bigstar
Grant-in-Aid for Young Scientists	 (S) Research done by one researcher aged 42 or less (The period is five years. The budget ranges roughly from 30 million yen to 100 million yen per project.) (A)(B) Research done by one researcher aged 39 or less (The period is two to four years. Classified in A or B, depending on the total budget provided.) ©(A) from 5 million yen to 30 million yen ★(B) 5 million yen or less
Grant-in-Aid for Research Activity Start-up	Research done by one researcher who has just been employed by the research institution, by one researcher who returns from childcare leave or other kinds of leave, or other researchers. (The period is up to two years. The budget is up to 1.5 million per fiscal year.)
Encouragement of Scientists	Research done by one person who is an employee of an educational/research institution, a company employee, or others (The period is up to one year. The budget is up to 1 million yen per project.)
Grant-in-Aid for Special Purposes Grant-in-Aid for Publication of Scientific Research Results	Funding of urgent and important research projects.
Publication of Research Results	Funding for publication or international dissemination of research achievements of a scientific society with high academic value

Enhancement of International Dissemination of Information	Funding of an effort to further enhance international dissemination of information, in order for academic societies, such as scientific associations, to contribute to international academic exchange.
Scientific Periodicals	Funding of academic journals that are periodically published by a scientific society, an association constituting a cooperative framework of a number of scientific societies, or other bodies, in order to contribute to international academic exchange
Scientific Literature	Funding of Scientific Literature issued by an individual or a group of researchers to disclose scientific research achievements
Databases	Funding of databases created by an individual or a group of researchers for public availability
ant-in-Aid for JSPS llows	Funding of research done by JSPS Fellows, including Foreign JSPS Fellows (for a period of up to three years)

✤ As of September 2013

XNo new invitation for applications is conducted for "Grant-in-Aid for Young Scientists (S)" and "Scientific Periodicals".

* Among the research categories marked with the sign \star (Scientific Research (C), Challenging Exploratory Research and Grant-in-Aid for Young Scientists (B)), research projects that are newly adopted in from FY2011 onward (hereinafter called "KAKENHI (Multi-year Fund)") or later will be implemented using KAKENHI (Multi-year Fund).

X Among the research categories marked with the sign (Scientific Research (B) and Grant-in-Aid for Young Scientists (A)), a part of the research projects that are from FY2012 onward (hereinafter called "KAKENHI (Partial Multi-year Fund)") will be implemented using KAKENHI (Multi-year Fund) (up to 5 million yen out of the total research budget).

X For Specially Promoted Research, a Grants-in-Aid for Scientific Research based on Acts Incurring Liabilities on the Treasury will be granted.

3. The Relationship between MEXT and JSPS

The Ministry of Education (currently, the Ministry of Education, Culture, Sports, Science and Technology) publicly recruited, screened applications and delivered grants in all of the research categories up to FY1998. From FY1999 on, these tasks were transferred to the Japan Society for the Promotion of Science (JSPS). In FY2013, the delivery of grants for "Scientific Research on Innovative Areas" and the call for proposals, the screening and delivery of grants for "Grant-in-Aid for Publication of Scientific Research Results (Publication of Research Results (B/C))" have been transferred. The call for proposals, screening and funding are currently being conducted as indicated below.

Research category	Call for proposals, screening	Delivery of grants
	Main body in the preparation of the procedures for lodging applications and the location where the applications should be submitted.	Main body handling informal decisions to grant the funding, and notices of the decision, and the location where the application forms for grants and the various other necessary documents should be submitted
Grant-in-Aid for Special Purposes	MEXT	MEXT
Scientific Research on Innovative Areas	MEXT	JSPS
Specially Promoted Research, Scientific Research, Challenging Exploratory Research, Grant-in-Aid for Young Scientists, Grant-in-Aid for Research Activity Start-up, Encouragement of Scientists, Grant-in-Aid for Publication of Scientific Research Results, Grant-in-Aid for JSPS Fellows	JSPS	JSPS

✤ As of September 2013

4. Rules Relating to KAKENHI

<u>KAKENHI</u> (Series of Single-year Grants) are governed by the Law on Optimizing Implementation of Budgets Relating to Subsidies (Law No. 179, 1955), Procedures on the Handling of Grants-in-Aid for Scientific Research (Announcement of the MEXT), Procedures on the Handling of JSPS Grants-in-Aid for Scientific Research (KAKENHI (Series of Single-year Grants)) (Regulations No. 17, 2003), and Others.

<u>The KAKENHI (Multi-year Fund)</u> are governed by the "Basic Policy on the Management of the KAKENHI (Multi-year Fund)", Procedures on the Handling of JSPS Grants-in-Aid for Scientific Research (KAKENHI (Multi-year Fund)) (Rule No. 19, 2011) and others.

<u>The KAKENHI (Partial Multi-year Fund)</u> are governed by the Law on Optimizing Implementation of Budgets Relating to Subsidies (Law No. 179, 1955), Procedures on the Handling of Grants-in-Aid for Scientific Research (Announcement of the MEXT), the "Basic Policy on the Management of the KAKENHI (Multi-year Fund)", Procedures on the Handling of JSPS Grants-in-Aid for Scientific Research (KAKENHI (Series of Single-year Grants)) (Regulations No. 17, 2003), Procedures on the Handling of JSPS Grants-in-Aid for Scientific Research (KAKENHI (Multi-year Fund)) (Rule No. 19, 2011) and others.

(1) Three types of rules for KAKENHI

There are three types of rules for KAKENHI, as follows:

- 1) Application rules: rules concerning the applications
- 2) Assessment rules: rules concerning the preliminary assessment (screening), the interim assessment, the ex-post assessment, and the research project progress assessment
- 3) Utilization rules: rules concerning the use of KAKENHI

Moreover, these three sets of rules	apply as follows.
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	Application rules	Assessment rules	Utilization rules
KAKENHI (Series of Single-year Grants)	MEXT Procedures on the call for proposals	MEXT Rules concerning the assessment for Grants-in-Aid for Scientific Research Screening Outline for Grants-in-Aid for Scientific Research, category "Scientific Research on Innovative Areas" Assessment Outline for Grants-in-Aid for Scientific Research, category "Scientific Research on Innovative Areas"	MEXT For researchers: Supplementary conditions For research institutions: Administrative work and other tasks concerning the use of Grants-in-Aid for Scientific Research (KAKENHI (Series of Single-year Grants)), to be performed by each research institution
KAKENHI (Series of Single-year Grants)	JSPS Procedures on the call for proposals	JSPS Rules concerning the screening and assessment for Grants-in-Aid for Scientific Research %The screening and assessment rules for FY2014 are scheduled to be made public in early October.	JSPS For researchers: Supplementary conditions For research institutions: Administrative work and other tasks concerning the use of Grants-in-Aid for Scientific Research (KAKENHI (Series of Single-year Grants)), to be performed by each research institution
KAKENHI (Multi-year Fund)			JSPS For researchers: Funding conditions For research institutions: Administrative work and other tasks concerning the use of Grants-in-Aid for Scientific Research (KA KENHI (Multi-year Fund)), to be performed by eac h research institution

		JSPS For researchers:
		Funding conditions
KAKENHI (Partial Multi-year Fund)		For research institutions: Administrative work and other tasks concerning the use of Grants-in-Aid for Scientific Research (newly adopted in FY2012 or later research projects of Scientific Research (B) and Grant-in-Aid for Young Scientists (A)), (research projects adopted in FY2012 or later),to be performed by each research institution

✤ As of September 2013

(2) Appropriate use of KAKENHI

KAKENHI are funded by the tax of citizens and other sources. Researchers receiving KAKENHI have a duty to comply with the related laws, regulations and utilization rules by researchers (subsidiary conditions or funding conditions), and also to use such grants appropriately. To ensure recipients comply with this requirement, we check whether no inappropriate use of KAKENHI will be made, when an application is made. (See note below.)

To facilitate the appropriate use of KAKENHI, research institutions to which the researchers belong are responsible for the management of the KAKENHI. The Administrative work that each research institution is required to carry out (rules for use for institutions) is determined.

Among other things, the research institution has the duty to secure the appropriate use of KAKENHI, for example, by setting up a system for the management and audit of the budget, and, for the expenditure of expenses for goods, by properly implementing inspections of delivered goods. In order to prevent fraudulent accounting through fictitious business transactions (so-called *"azukekin"*), it is important, in addition to appropriate inspection of delivered goods, to widely inform traders about the rules and to obtain the understanding and cooperation of traders in the prevention of this kind of fraudulent accounting. Researchers need to strictly respond to traders who have been involved in fraudulent accounting through fictitious business transactions, for example by stopping doing business with such traders.

Researchers and persons in charge in the research institution should fully understand prior to the application that these rules will apply after the application is approved.

(3) Important points on the use of KAKENHI

For KAKENHI (Series of Single-year Grants) a package plan throughout the research period should

be prepared and submitted upon application. However, after the research project is adopted, it will be handled as a project which is funded for each fiscal year during the research period in question. For example, KAKENHI (Series of Single-year Grants) cannot be used to pay costs in a fiscal year which falls outside the fiscal year(s) in which the funded project should be carried out.

Furthermore, for "Specially Promoted Research", KAKENHI (Series of Single-year Grants) based on "Acts Incurring Liabilities on the Treasury" will be funded. Since the decision to grant the funding over multiple fiscal years will be made, part of the handling will be different.

Moreover, when it can be expected that the funded project will remain unfinished within the fiscal year, due to reasons beyond the control of the applicant(s), which could not be foreseen at the time it was decided to grant the funding, the costs in question can be carried over to the next fiscal year, provided that the Minister of Education, Culture, Sports, Science and Technology (MEXT) submits a request for approval for the carry-over to the Finance Minister through JSPS, and the approval from the Finance Minister is obtained.

<u>For KAKENHI (Multi-year Fund)</u>, the research activity after the adoption of the grant will be handled as a single funded project throughout the whole research period. Therefore, it is possible to use the grant for paying costs in a fiscal year that is different from the fiscal year of receipt of the grant, if this happens within the research period.

Moreover, if within the research period an amount of money remains unused by the end of each fiscal year, except for the final fiscal year, costs can be carried over to the next fiscal year, without researchers having to go through prior authorization procedures. In addition, if an amount of money remains unused by the end of the final fiscal year, costs can be carried over to the next fiscal year, by obtaining prior approval for extension of the research period.

<u>For KAKENHI (Partial Multi-year Fund)</u>, a package plan throughout the research period should be prepared and submitted upon application. However, after the research project is adopted, the period of the funded project consists of one single fiscal year for non-fund based grants, and multiple fiscal years for fund based grants. Based on this, researchers should appropriately conduct their funded project. Moreover, basically non-fund based grants follow the handling of KAKENHI (Series of Single-year Grants), and fund based grants follow the handling of KAKENHI (Multi-year Fund).

- (4) The handling of a case in which the report on the research achievements has not been submitted
 - The report on the research achievements plays the important role of making the achievements of the research funded with a KAKENHI widely known to the citizens. It is an important tool in order to widely return the achievements of the research funded with a KAKENHI, which in

turn has the tax of citizens and other sources as its resources, to society.

Therefore, researchers should submit the report on the research achievements at the end of the research. The content of the research will be widely disclosed to the public via Database (KAKEN) of the National Institute of Informatics and other tools. Moreover, the research institution to which the researchers belong has to collect and submit the reports on the research achievements.

2) No funding of KAKENHI will be conducted for researchers who do not submit the report on the research achievements at the end of the research, without any reason. Moreover, it may happen that the decision to KAKENHI to the researcher in question is cancelled, or that an order to return the grant is issued. It may also happen that information, such as the name of the research institution to which the researcher in question belongs and other data, is made public.

Furthermore, if researchers have failed, without good reason, to submit the scheduled report on the research achievements, then implementation of other KAKENHI due to be implemented in the same fiscal year will be suspended. Therefore, it is the responsibility of the representative of the research institution to ensure that the report on the research achievements is submitted without fail.

(5) Treatment in case of infringement of related laws

When a research project has been implemented, by violating related laws, guidelines, etc., for example when the content which is entered in the application documents is false, it is possible that the provision of KAKENHI is not carried out or cancelled.

(Note) Examples of recent fraudulent use, fraudulent receiving of grants or fraudulent acts committed during the

research.

- O Fraudulent use
- Someone instructed a trader to complete a fictitious transaction, pretended to have purchased consumables, had KAKENHI expended by the university, and then had it managed as money deposited to the trader.
- Someone instructed a trader to complete a fictitious transaction, had a false invoice issued on which the name of a good that is different from the good that had actually been purchased and delivered was stated, and then had KAKENHI expended by the university.
- Someone had a work attendance sheet for work that was actually not carried out drawn up for a graduate student, charged the payment of remuneration, and then managed the money himself, as a pooled fund.
- Someone stayed in a destination different from the scheduled travel plan, in order to have a meeting on collective research unrelated to the purpose of the research project, and then put the costs under travel expenses associated with overseas travel.
- (Note) The expenditure of KAKENHI for fictitious and other transactions, like the ones mentioned in the examples, are all considered fraudulent use, even if the expenditure of KAKENHI was intended for the research project related to the Grant-in-Aid for Scientific Research in question.
- O Fraudulent receiving of grants
- A researcher who was not eligible to apply or receive grants applied for a KAKENHI and for funding of it, and then fraudulently received the subsidy.
- O Fraudulent acts committed during the research
- Someone manipulated or forged experimental data or a chart in a research paper published as the achievements of research funded with a KAKENHI.
- Someone translated an original English-language research paper without obtaining prior consent from the author(s), incorporated this translation into a book or report on the research achievements published as the achievements of research funded with a KAKENHI, and made it public as the research achievements of the research project in question, without clearly mentioning that it was being quoted.

5. "Guidelines on the Proper Implementation of Competitive Funding" and Other Matters

The "Guidelines on the Proper Implementation of Competitive Funding" (agreement of the liaison meeting of related offices and ministries on competitive funding, dated September 9, 2005) agree on the rules in the field of competitive funding on the elimination of unreasonable reduplication and excessive concentration, fraudulent receiving, of grants, fraudulent use and research-related fraudulent acts in research papers, and other matters in the related offices and ministries.

During the implementation of the competitive funding, including KAKENHI, these matters will be dealt with appropriately, based on these Guidelines and other matters. Therefore, the applicant should consider carefully the following points.

(1) Eliminate Unreasonable Reduplication and Excessive Concentration

1) In order to avoid "Unreasonable Reduplication or Excessive Concentration" (*) of competitive funds, we may, to the extent necessary, share information on a part of the project description of

the application between other divisions in charge of competitive funds, including other offices and ministries, independent administrative legal entities, etc, making use of the Cross-ministerial Research and Development management system (e-Rad).

Therefore, in the case of an application for more than one competitive funding (including in the case of an application for more than one Research Categories for KAKENHI), and other matters, the applicant should be careful when preparing the Proposal for Grant-in-Aid so that, for example, he or she fills in the Title of the Proposed Project in a way that makes it clear that it does not entail unreasonable reduplication.

If unreasonable reduplication or excessive concentration is found, KAKENHI may not be delivered.

2) Concerning the completed information on the condition of applications and receiving of other Competitive Funding and other matters, including from other offices and ministries, when preparing the Proposal for Grant-in-Aid (name of Research Funds, Title of Proposed Project, Research period, Effort, etc.), if the stated information turns out to be different from the facts, the Research Project will not be adopted, the adoption will cancelled, or the allotted research budget will be reduced.

Moreover, concerning the "Effort", and other matters, necessary for the activity to build a center in the program called "World Premier International Research Center Initiative", it is necessary to fill in the Proposal for Grant-in-Aid. Therefore, when completing this document, the applicant should verify the "Procedures for Preparing and Entering a Proposal".

- (2) Dealing with Fraudulent Use, Fraudulently Received Grants or Fraudulent Acts Committed During the Research
 - 1) No KAKENHI will be offered, for a fixed period of time, when the researcher has made fraudulent use of KAKENHI, has fraudulently received KAKENHI, or has committed fraudulent acts. (For details see "(Reference 2) Procedures on the Handling of Grants-in-Aid for Scientific Research", "(Reference 3) Procedures on the Handling of JSPS Grants-in-Aid for Scientific Research – KAKENHI (KAKENHI (Series of Single-year Grants))" and "(Reference 4) Procedures on the Handling of JSPS Grants-in-Aid for Scientific Research – KAKENHI (KAKENHI (Multi-year Fund))".) Moreover, for research projects of which it has been established that fraudulent use, fraudulent receipt of grants or fraudulent acts have taken place, researchers may be requested to completely or partially return the KAKENHI in question. Furthermore, an outline of the inappropriate use of grants, the inappropriate receiving of grants and/or the inappropriate acts in question of the researcher who falls in those categories (containing an outline of the research achievements in the research institution,

the names of the people involved, the name of the system, the institution they belong to, the research project, the budget, the fiscal year of the research, the inappropriate content, details of the measures taken, etc.) will be made public.

Also <u>researchers who fraudulently use or receive competitive funds other than</u> <u>KAKENHI (including funds under the control of other ministries)</u>, or who commit <u>fraudulent acts by means of these competitive funds</u>, and therefore are excluded from <u>receiving these funds in question</u>, for a fixed period of time, will not receive KAKENHI <u>for a fixed period of time</u>.

Moreover, the researcher who falls in those categories may experience difficulties when applying for other competitive funds, since an outline of the inappropriate case in question will be provided to other bodies in charge of competitive funds, starting with the other ministries, including independent administrative legal entities and other institutions allocating grants.

Moreover, the researcher who falls in those categories may experience difficulties when applying for other competitive funds, since an outline of the inappropriate use of grants, the inappropriate receiving of grants and/or the inappropriate acts in question (containing an outline of the research achievements in the research institution, the names of the people involved, the institution they belong to, the research project, the budget, the fiscal year of the research, the inappropriate content, details of the measures taken, etc.) will be provided to other bodies in charge of competitive funds, starting with the other ministries, including independent administrative legal entities and other institutions allocating grants.

2) If it has been established that fraudulent acts have taken place in a research paper, a report, or other research output funded by KAKENHI, the researcher will be treated in the same way as stated in the above-mentioned 1). The severity of the fraudulent acts and other matters will be taken into consideration.

Moreover, a person who is determined to have a certain responsibility, because, for example, he or she neglected his/her duty of care as a person in charge of the paper, report, etc. in question, will be treated in the same way, even if it has not been established that he or she was directly involved in the fraudulent acts.

(*) Eliminate Unreasonable Reduplication and Excessive Concentration

"Guidelines on the Proper Implementation of Competitive Funding" - Extract-(Agreement of the Liaison Meeting of Related Offices and Ministries on Competitive Funding, Dated September 9, 2005 (Revision: October 17, 2012)) 2. Eliminate Unreasonable Reduplication and Excessive Concentration (1) Basic Policy of the Unreasonable Reduplication and Excessive Concentration ① In these guidelines, "Unreasonable Reduplication" is a situation in which more than one competitive funding is needlessly and repeatedly allotted to one and the same research project (i.e. the title and the content of the research to which competitive funding is being allotted; the same applies below) carried out by one and the same researcher. Either of the following cases fall under "Unreasonable Reduplication". OCases where applications have been made at the same time for more than one competitive funding for substantively the same research project (including research projects that overlap to a considerable degree; the same applies below), and where these research projects are redundantly adopted . oCases where an application has been made again for substantively the same research project as another project that has already been adopted, and for which the allotment of competitive funding has already been completed. OCases where there is a reduplication of the use research funds among more than one research project. OOther cases corresponding to the cases mentioned above. 2 In these guidelines, "Excessive Concentration" is a situation in which the entire research funds that are allotted to one and the same researcher or research group (hereinafter called "researcher, etc.") in the fiscal year in question exceeds the limit within which they can be used effectively and efficiently, and in which the research funds cannot be used within the research period. Either of the following cases fall under "Excessive Concentration". OCases where, in the light of the abilities of the researcher, etc. and the research methods, etc., excessive research funds are allotted. ○Cases where, in comparison with the effort (the time allocation rate (%) of time necessary for the implementation of the research activities with the entire working time of researcher) that is being allotted to the research project in question, excessive research funds are allotted. OCases where the purchase of unnecessarily expensive equipment is carried out. OOther cases corresponding to the cases mentioned above.

6. On the Promotion of the 'Dialogue on Science and Technology with Citizens' (A Basic Course of Action)

For KAKENHI, it has, until now, clearly been mentioned in the utilization rules by researchers (subsidiary conditions or funding conditions), the Handbook for KAKENHI, and other materials, that the expenses for the creation of a homepage for the publication of the research achievements, the expenses for the creation of a pamphlet publicizing research achievements, the expenses associated with outreach activities, such as, for example, activities publicizing the research achievements among the general public, can be paid as direct costs. Moreover, researchers must endeavor to positively disseminate the achievements produced through KAKENHI to society and

citizens. For example, it is requested that researchers mention information concerning outreach activities in the report on the research achievements they are requested to prepare after the completion of the research period.

Furthermore, JSPS has implemented the program "HIRAMEKI ☆ TOKIMEKI SCIENCE" in order to introduce the newest research achievements to elementary school, junior high-school and senior high-school pupils, in an easy-to-understand form, through experiences, experiments and lectures. Researchers are invited to make use of this program.

Moreover, in "On the Promotion of the 'Dialogue on Science and Technology with Citizens' (A Basic Course of Action)" (June 19, 2010, the Minister of State for Science and Technology Policy and the Experts of the Council for Science and Technology Policy) which has been compiled in June 2010, the activity in which researchers explain the content and achievements of their research activities to society and citizens in an easy-to-understand form is placed in the above-mentioned 'Dialogue on Science and Technology with Citizens'. Researchers and other persons who have received an allotment of public research funds amounting more than 30,000,000 yen per year per case are requested to positively work on the 'Dialogue on Science and Technology with Citizens'. Universities and other research institutions are also requested to make positive efforts in order to enable the proper implementation of the Dialogue on Science and Technology between Citizens, on the one hand, and researchers and other persons who have received public research funds, on the other hand, for example, by setting up support systems.

For KAKENHI, there is the question "Are you positively trying to publicize and disseminate the research content and research achievements?", especially in the research progress assessment of, for example, Specially Promoted Research, for which researchers receive a relatively high amount of research funds, and the interim assessment of, for example, Scientific Research on Innovative Areas (Research in a proposed research area). Therefore, based on the above-mentioned Basic Course of Action, researchers should disseminate the achievements of research funded with KAKENHI to society and citizens in an even more positive way.

7. Cooperation with the National Bioscience Database Center

The National Bioscience Database Center (http://biosciencedbc.jp/) has been established in the Japan Science and Technology Agency (JST, an independent administrative legal entity) in April 2011, in order to promote the integrated use of databases in the area of life science that have been created by various research institutions and other institutions.

This Center spurs the active participation of related institutions, and based on four pillars, namely (1) the planning of strategies, (2) creation and operation of portal websites, (3) research on and development of core technology for the integration of databases and (4) the promotion of the integration of biotechnology-related databases, it is promoting projects aiming at the integration of databases in the area of life science. In this way, through wide sharing and utilization in the researchers community of the research achievements in the area of life science produced in Japan, the Center aims at invigorating overall research in the area of life science, including research and development connected to basic research and industrial applied research.

JSPS would like to request researchers to cooperate by providing to the Center copies of raw data related to achievements published in research papers and other output in the area of life science, or copies of created open databases.

Moreover, the copies provided will be able to be utilized on a non-exclusive basis as reproductions, alterations, or in other necessary forms. Furthermore, JSPS would like researchers to understand in advance that, in response to requests of the institutions that received copies, it would also like request researchers to cooperate by providing all the information necessary for utilizing the copies. Furthermore, the National Bioscience Database Center has developed guidelines for data on humans, in order to promote the sharing and use of data related to research in the area of life science, with due considerations to the protection of personal information.

NBDC human data sharing guidelines Cf. URL: http://humandbs.biosciencedbc.jp/guidelines/

Please direct inquiries to: Japan Science and Technology Agency, National Bioscience Database Center Tel. 03-5214-8491

8. On the Inter-University Bio-Backup Project

The purpose of the Inter-University Bio-Backup Project is to "back up" biological genetic resources, which are indispensable research resources in various research areas, and to avoid damage or loss of biological genetic resources due to unforeseen accidents, disasters, etc. The project newly commenced from 2012.

In the National Institute for Basic Biology of the Inter-University Research Institute Corporation National Institutes of Natural Sciences, which is the core of this project, the IBBP Center (Inter-University Bio-Backup Project for Basic Biology) (http://www.nibb.ac.jp/ibbp/) has been

established as a backup center for biological genetic resources. It is equipped with the newest equipment necessary for the backup of biological genetic resources.

Any researcher who belongs to a university or a research institution may apply for storage. Biological genetic resources that can be stored in IBBP are samples that can be proliferated (amplified) or cryopreserved (for vegetable seeds, the refrigeration or deep-freezing preservation condition needs to be definite), and being not pathogenic is also a condition. Since backup is provided free of charge, researchers should make use of IBBP.

Any researcher who belongs to a university or a research institution may apply for storage. Biological genetic resources that can be stored in IBBP are samples that can be proliferated (amplified) or cryopreserved (for vegetable seeds, the refrigeration or deep-freezing preservation condition needs to be definite), and being not pathogenic is also a condition. Since backup is provided free of charge, researchers should make use of IBBP.

Please direct inquiries to:

Inter-University Research Institute Corporation National Institutes of Natural Sciences, IBBP Center, Executive Office Tel.0564-59-5930, 5931

II. Details of the Call for Proposals

A call for proposals for "Grants-in-Aid for Scientific Research KAKENHI" will be conducted together for hitherto known Grants-in-Aid for Scientific Research (hereinafter called "KAKENHI (Series of Single-year Grants)") and Multi-year Fund Scientific Research Grants (hereinafter called "KAKENHI (Multi-year Fund)").

The current round of call for proposals opens before the finalization of the budget for FY2014 in order to enable researchers to proceed with their preparations for the screening early, so that they can start their research as soon as possible.

Therefore, please be aware in advance that, depending on the situation regarding the overall budget, details like resources to be allocated and other matters may be subject to change at a later stage.

1. Research Categories for which a Call for Proposals is Organized

The following shows the research categories for which the Japan Society for the Promotion of Science is organizing a call for proposals:

Specially Promoted Research, Scientific Research (S/A/B/C), Challenging Exploratory Research, Grant-in-Aid for Young Scientists (A/B)

* For Grant-in-Aid for Young Scientists (S) no call for proposals will be conducted.

2. Schedule from Application to Receipt of Funding

Procedures that need to be completed prior to the deadline for the submission of the application documents
 Principal Investigator should sufficiently cooperate with the research institution, and should adequately respond to its requests.

The Date and Time	Procedures to be Performed by the Principal Investigator (See "III Instructions & Procedures for those Intending to Apply" and "IV Instructions & Procedures for those Who Have Already Been Accepted")	Procedures to be Performed by the Research Institution (See "V Instructions & Procedures for Staff of the Research Institution")
From September 1, 2014 Start of the Call for Proposals	 (1)Preparing the Application Investigators should access the Electronic Application System using the ID and the e-Rad Password which has been provided by the research institution and preparing the application. (2) Submission (Sending) of the Application Documents The Principal Investigator should submit (send) the application documents to the research institution he/she belongs to, by the deadline decided the research institution. 	 Procedures to be completed, if the need arises 1) The Research Institution obtains an ID and Password for e-Rad from the person in charge of the operation of e-Rad (This does not apply if the research institution already obtained them.) *The issue of the ID and the Password takes about 2 weeks. 2) Registration of the Researcher Information in e-Rad and other matters 3) Research institutions issue an ID and password to the Principal Investigators. (This does not apply if the researcher already obtained an ID and a password.) 4) <u>Submission of Submission of the System", based on the Guidelines.</u> (Deadline for submission: October 4 (Fri.)) 5) <u>Submission (Sending) of the Application Documents</u>
November 8 (Fri) 4:30 pm		
Deadline for the Submission		

Notes:

1. After the Principal Investigator submit (Sending) to the application to the research institution (mentioned in "Procedures to be Performed by the Principal Investigator" ②), the research institution should submit (Sending) to the JSPS the application the application by the deadline for the submission (mentioned in "Procedures to be Performed by the Research Institution" 5)).

Next, he or she should verify the section "Preparing the Application and Submitting the Application" (pages 43-54), etc., as well as verify the procedures designated by the research institution, etc. (deadline for the submission of the application, etc., in the research institution), with the office worker in charge in the research institution.

- 2. When the researcher is applying for KAKENHI, he or she should register the researcher information beforehand in e-Rad. The research institution should perform the registration in e-Rad. Therefore, the researcher who is planning to apply should verify the state of the registration with the office worker in charge in the research institution.
- 3. The research institution should submit a "Self-assessment Checklist on the Implementation of the System", based on the "Guidelines on the Management and Audit of Public Research Funds at Research Institutions (Implementation Standards)" (section 4 in "Procedures to Be Completed by the Research Institution"). If it has not

been submitted, the applications of researchers belonging to the research institution in question will not be accepted in the Electronic Application System.

Specially Promoted Research	Scientific Research (S)	Scientific Research (A/B/C), %2 Challenging Exploratory Research, Grant-in-Aid for Young Scientists (A/B)
December 2013 to April 2014: Screening	December 2013 to May 2014: Screening	December 2013 to March 2014: Screening
Late April 2014:	Late May 2014:	Early April 2014:
Informal decision to	Informal decision to	Informal decision to
grant the funding	grant the funding	grant the funding
Middle of May:	Middle of June:	Late April:
Application for funding	Application for funding	Application for funding
Late June:	Late June:	Late June:
Decision concerning	Decision concerning	Decision concerning
the granting of the funding	the granting of the funding	the granting of the funding
Middle of July:	Middle of July:	Middle of July:
Remittance	Remittance	Remittance
(part of the first term) *1	(part of the first term) %1	(part of the first term) %1
Around October:	Around October:	Around October:
Remittance	Remittance	Remittance
(part of the second term) %1	(part of the second term) $\times 1$	(part of the second term) $\times 1$

(2) Schedule after the Submission of the Application Documents (plan)

Scientific Descent (/D/C) (Concerting		
Scientific Research (/B/C) (Generative		
Research Fields),		
December 2013 to June 2014:		
Screening		
Late July 2014:		
Informal decision to		
grant the funding		
Middle of August:		
Application for funding		
Late September:		
Decision concerning		
the granting of the funding		

*1 From FY2012 on, the amount requested for funding or the amount requested for payment (direct costs) will be remitted separately in two installments, i.e. one during the first term (from April until September) and the other during the second term (from October until March), if this amount for the fiscal year in question is 3 million yen or more, and it will be remitted in a lump sum during the first term, if it is less than 3 million yen.

2 This does not apply to Scientific Research (B/C) (Generative Research Fields).

3. Details of Each Research Category

1) Specially Promoted Research: KAKENHI (Series of Single-year Grants)

- A) Intended for: Research project carried out <u>by one researcher or by a relatively small group</u> of researchers that is likely to yield highly acclaimed research achievements through intensive funding. The goal of the funding is the increased promotion of research which is highly regarded in the international arena.
- B) Total budget provided (total budget throughout the research period the same applies below): As a general indicator, the upper limit of the total budget provided per research project is fixed at around 500 million yen. However, if it is deemed necessary, applications exceeding this amount are also possible. Moreover, no lower limit has been established.
 - ※ Handling of research projects with a total budget exceeding 500 million yen If the total budget exceeds 500 million yen, the reason why such a budget is needed should be stated in detail in the appropriate section of the proposal for grant-in-aid. Especially rigorous screening on the appropriateness of the budget will be conducted.
 - \times On the lower limit of total budget
 - No lower limit of the total budget has been established for research categories that further promote research which is highly regarded in the international arena and that are likely to yield highly acclaimed research achievements.
- C) Research period: Three to five years
- D) Number of research projects scheduled to be selected: Around 10 (subject to strict selection)

E) Research funding: <u>KAKENHI (Series of Single-year Grants) based on Acts Incurring</u> <u>Liabilities on the Treasury</u> are granted.

- F) Important points: For research projects that have been adopted, a research progress assessment will be conducted in the fiscal year before the final fiscal year of the research period. Moreover, based on the results of this research progress assessment, an increase or a reduction of the research budget, cancellation of the research, or other measures may subsequently be implemented, if the need arises. Moreover, a follow-up assessment will be conducted 5 years after the completion of the research.
 - X On Acts Incurring Liabilities on the Treasury

For Specially Promoted Research, "Acts Incurring Liabilities on the Treasury" have been introduced, and a decision to grant the funding over multiple fiscal years will be made.

2) Scientific Research (S): KAKENHI (Series of Single-year Grants)

 A) Intended for: <u>Research project performed by one researcher or by a relatively small</u> <u>group of researchers</u>, with the purpose of achieving a major development in creative and pioneering research, based on past research achievements

B) Total budget provided: From 50 million yen to around 200 million yen

C) Research period: Five years as a general rule

XAs an exception, the research period may be set at three or four years, in case any of the researchers are expected to leave the research institution, due to reaching retirement age, or for any other reason.

- D) Research funding: KAKENHI (Series of Single-year Grants) are granted.
- E) Important points: For research projects that have been adopted, a research progress assessment will be conducted in the fiscal year before the final fiscal year of the research period. Moreover, based on the results of this research progress assessment, an increase or a reduction of the research budget, cancellation of the research, or other measures may subsequently be implemented, if the need arises.

3) Scientific Research (A/B/C)

Scientific Research (A): KAKENHI (Series of Single-year Grants) Scientific Research (B): KAKENHI (Series of Single-year Grants) and KAKENHI (Multi-year Fund)

Scientific Research (C): KAKENHI (Multi-year Fund)

- A) Intended for: Research project done by one or by multiple researchers, with the purpose of achieving a major development in creative and pioneering research
- B) Total budget provided: Applications are to be divided into the following three divisions, according to the total budget provided.

Division	Total budget provided	Screening division
Scientific Research (A)	between 20 million and 50 million yen	General / Overseas Academic
		Research

Scientific Research (B)	between 5 million and 20 million yen	General / Overseas Academic
Schementer (D)	yer	
		Research/ Generative Research
		Fields
Scientific Research (C)	5 million yen or less	
		General/ Generative Research
		Fields

C) Research period:

Screening division: "General" and "Overseas Academic Research": Three to five years Screening division: "Generative Research Fields": Three to five years (Depending on the fiscal year of the application, the research period is different.)

D) Screening division: When applying, select one of the following screening divisions.

Screening division: "General"

The screening division accepts applications relating to <u>Scientific Research</u> (A/B/C). It is intended for projects which will develop innovative research.

All applications should be made for this screening division, except for research projects which are classified as "Overseas Academic Research" and "Generative Research Fields".

Screening division: "Overseas Academic Research"

This screening division only accepts applications for <u>Scientific Research (A/B)</u>. It is intended for research projects having as their <u>major purpose</u> in terms of research subject and research methods <u>conducting a field survey</u>, <u>observation</u>, <u>or</u> <u>collecting data at a specific location overseas</u>.

If a field survey, or a similar survey, is not the main purpose of the project, please apply for the "General" screening division. As far as equipment is concerned, the use of grants in the "Overseas Academic Research" screening division is limited to equipment that is directly used for surveys, observation or collection of data overseas, such as inexpensive personal computers.

Screening division: "Generative Research Fields"

This screening division only accepts applications for <u>Scientific Research (B/C)</u>. For FY2014 the three areas "Neo-Gerontology", "Mathematical Sciences in Search of New Cooperation" and "Food Cycle Research" have been established.

Attached Table 2 Please avoid applying for "Generative Research Fields" in the case of research projects where it is possible to select an appropriate research field from Attached Table 2 "Grants-in-Aid for Scientific Research FY2014 List of Categories, Areas, Disciplines and Research Fields".

(*) • The set period for each area is five years and the period of the invitation for applications is fixed from the fiscal year of the establishment of the area until the third fiscal year. In the first fiscal year of the set period, the research period for which it is possible to apply is three to five years, in the second fiscal year of the set period, it is three to four years, and in the third fiscal year of the set period, it is three years.

• Number of research projects scheduled to be selected: <u>30 for each area</u> (subject to careful selection).

• Please note that, during the stage of the screening of "Generative Research Fields", Principal Investigators may be requested to submit additional materials, if the need arises.

• Research exchange meetings are scheduled to be held for researchers whose projects have been adopted.

 E) Research funding: For Scientific Research (A), <u>KAKENHI (Series of Single-year Grants)</u> are granted. For Scientific Research (B), <u>KAKENHI (Series of Single-year Grants)</u> and <u>KAKENHI (Multi-year Fund)</u> are granted. For Scientific Research (C), <u>KAKENHI (Multi-year Fund)</u> are granted.

4) Challenging Exploratory Research: KAKENHI (Multi-year Fund)

- A) Intended for: <u>A Research project at an exploratory stage</u>, done by one or multiple researchers, <u>that is based on a unique concept</u>, <u>that is challenging</u>, <u>and that sets an ambitious goal</u>.
- B) Total budget provided: 5 million yen or less
- C) Research period: One to three years
- D) Research funding: KAKENHI (Multi-year Fund) are granted.

5) Grant-in-Aid for Young Scientists (A/B)

Grant-in-Aid for Young Scientists (A): KAKENHI (Series of Single-year Grants) and KAKENHI (Multi-year Fund)

- Grant-in-Aid for Young Scientists (B): KAKENHI (Multi-year Fund)
- A) Intended for: A research project conducted by <u>one researcher aged 39 or less as of April 1,</u>
 <u>2014</u> (a person born on April 2, 1974, or thereafter) with an original idea that is expected to bring forth a major development in the future
- B) Total budget provided: Applications are to be divided into the following two divisions, depending on the total budget provided

Division	Total budget provided
Grant-in-Aid for Young Scientists (A)	From 5 million yen to 30 million yen
Grant-in-Aid for Young Scientists (B)	5 million yen or less

- C) Research period: Two to four years
- D) Research funding: For Grant-in-Aid for Young Scientists (A), <u>KAKENHI (Series of Single-year Grants) and KAKENHI (Multi-year Fund)</u> are granted. For Grant-in-Aid for Young Scientists (B), <u>KAKENHI (Multi-year Fund)</u> are granted.
 E) Important points: On the "Restriction on the Number of Times of Receiving a Grant(*)". From the call for proposals of FY2010 on, JSPS decided to introduce a limitation on the number of times applicants can receive grants through Grant-in-Aid for Young Scientists (S/A/B). <u>JSPS has decided that applicants can only receive grants twice for any of the research categories, through Grant-in-Aid for Young Scientists (S/A/B).</u>
- (*) "Receiving a grant" means being selected as a Grant-in-Aid for Young Scientists (S/A/B) "Receiving a decision concerning the granting of the funding" here.

In addition, even if a research project of which the research period goes over more than one fiscal year received a decision concerning the granting of the funding, under one and the same project number, the "Number of Times of Receiving a Grant" will be considered as "one time".

Therefore, if, for example, researcher A conducted research from FY2003 to FY2004 with a "Grant-in-Aid for Young Scientists (B) (project number: 15*****)", and is conducting research from FY2006 to FY2009 with a "Grant-in-Aid for Young Scientists (A) (project

number: 18*****)", the "Number of Times of Receiving a Grant" will be considered as "two times".

Moreover, in both the following cases, the "Number of Times of Receiving a Grant" will be considered as "one time".

- Cases where the researcher declined the application for funding in the middle of the research period, or where he or she discontinued the research, after he or she received a decision concerning the granting of the funding.
- Cases where the researcher applied during Grants-in-Aid for Scientific Research FY2006 for a "Grant-in-Aid for Special Purposes (Trial of Multiple Applications per Year)" with a research plan suitable for a "Grant-in-Aid for Young Scientists", where that application was adopted, and where the researcher received the decision concerning the granting of the funding.
- (Reference) Please note that the following cases do not contain a "Number of Times of Receiving a Grant".
 - In cases where, after the researcher received an informal decision to grant the funding for new research projects, he or she refused the application for funding, and did not receive the decision concerning the granting of the funding, there is no "Number of Times of Receiving a Grant". (This also includes cases where the researcher declines the grant, after he or she suspended the application for funding.)
 - For Continued Research Projects of the category "Grant-in-Aid for Young Scientists (B)" in FY2002 (projects that have been newly approved in FY2001 as "Encouragement of Scientists (A)" with project number "13*****") there is no "Number of Times of Receiving a Grant", even if the researcher would have received the decision concerning the granting of the funding.