World Premier International Research Center Initiative (WPI) FY2022 Application Guidelines (tentative translation)

1. Purpose of program

To elevate the level of science and technology in Japan and continuously trigger innovation that serves as an engine for future growth, it will be necessary to boost the nation's basic research capabilities while strengthening its global competitiveness. On the other hand, the spread of the COVID-19 pandemic has reduced opportunities for conducting international research collaboration around the globe. We can, however, use this situation as an opportunity to impel a structural shift in Japan's research system, one that frees it of old ways and gives a new shape to research activities. To this end, we will need to pursue new innovations and novel undertakings unhindered by conventional thinking that can be leveraged to create highly attractive research centers that draw to themselves outstanding researchers from both in and outside Japan. Optimum use will need to be made of these centers in not only advancing global brain circulation but also in creating new added values attained by revolutionizing research systems accompany the building of a robust research environment.

This program provides priority support for proposals aimed at creating top world-level research centers that have a clear identity and are staffed at their core with world-leading researchers. By achieving a very high research standard, providing an excellent research environment, and prompting system reform while taking other independent initiatives, the centers should be "globally visible" and capable of attracting top-level researchers from around the world.

To this end, the program provides financial support for the measures aimed at physically assembling outstanding researchers and realizing a research environment free of conventional systemic constraints. Accordingly, this program is of a completely different nature from the usual research-funding programs operated mainly to provide support for research projects. For the center's research projects, additional resources must be secured separately by the center and its researchers.

Via this call, MEXT will select three center projects aimed at creating world-premier international research centers under the WPI's new missions established in December 2020. (See Appendix 1 for a description of the "new missions.") These Application Guidelines govern this call for new center project proposals.

2. Eligible applicants

Host institutions (core institutions seeking to build a world premier international research center) that qualify for WPI support:

Universities

Corporations that establish universities

Inter-university research institutes

National research and development agencies

Public interest corporations (PICs)

*In cases when the person in charge of the host institution's management and operation and the person in charge of its research and education are different, they should jointly sign the grant proposal and clearly state their respective responsibilities in carrying out the center project. In this call for proposals, a host institution may only apply for one center project.

Under this call via which centers will be selected based on the WPI's new missions, host institutions that currently have center(s) supported by WPI funding (hereafter referred to as "WPI Centers") and host institutions that have had center(s) whose WPI funding has ended (hereafter referred to as "WPI Academy Centers") are also eligible to apply.

However, host institutions that already have a WPI Center selected under the new missions are not eligible to apply. With regard to host institutions that currently have a WPI Center or a WPI Academy Center, the present state of their commitment (e.g. personnel and financial support and allocation of operational resources) to those centers and their ability to effectively allocate resources to the new center project while continuing to support the existing center will be strictly verified and reflected in the screening process.

3. Scheduled number of awards:

Three

4. Implementation period and evaluations

The grant period under this program is 10 years.

An interim evaluation will be carried out 5 years after the start of a project and a final evaluation 10 years after. The interim evaluation will assess the state of progress being made in establishing the center and may, when necessary, require the project plan to be revised or the project to be terminated early. In addition, the host institution will be evaluated with regard to its concrete plan to secure the autonomy of the WPI center during the remaining 5 years of the grant period (from the 6th through 10th year). When its plan is assessed to be inadequate, the host institution will be required to revise it.

5. Concepts and requirements of eligible projects

To be eligible, proposals must place importance on "people" (e.g. researchers and staffs) while providing a 10-year plan for establishing an international research center under a consistent midand long-term vision of the center's director. It will be necessary to advance holistically the establishment of the center--on one hand as an institute that can achieve the maximum degree of

research capability and, on the other hand, as an institute that can prompt research system reform within the host institution. The center must, therefore, have the commitment of both its director and the head of the host institution.

Toward achieving the WPI's new missions, the project must satisfy all of the following (1)-(10) requirements, providing a clear description of the steps and timetables to meet them. Submitted proposals are not only used in the application screening process but are also used afterwards to assess the state of the project's progress.

Proposals that in practice merely extend the period of an existing WPI center will not be accepted.

(1) Research fields

Focus is placed on basic research in the subject research domain (including fields that seek to transfer basic research to applications). In principle, the research fields should be cutting-edge fields fused in ways that can be expected to create key domains in the future.

The characteristics sought are (i) fields in which Japan's expertise can excel, (ii) challenging fields that can be expected to solve world-level scientific and/or technological issues and that have international appeal, and (iii) fields that remain relevant over the relatively long period of 10 years and that retain a top world-level standing by perpetually and strategically challenging the creation of new domains while developing future key fields.

In establishing new domains, the main fields to be fused should be indicated. In creating new science and in fusing research fields, the expected roles to be played by mathematics and information science should also be indicated.

In April 2021, the Science, Technology, Innovation Basic Law was enacted, which among other things, addresses the promotion of science and technology related specifically to the humanities and social sciences. Accordingly, projects solicited include those that aim to generate a higher order "integrated knowledge" through the fusing of knowledge in the humanities and social sciences and of knowledge in the natural sciences.

(2) Research objectives

The research objectives to be achieved by the end of the grant period (in 10 years) should be set and articulated in an easy-to-understand manner so as to clearly convey the focus of the center's research, including its projected initiatives and achievements, and to portray the image of the center as a globally visible research center both in Japan and abroad.

In describing the objectives, the following should be articulated in an easily understandable manner: What kind of research area is expected to open by fusing various fields? In that process, what world-level scientific and/or technological issues are sought to be solved? What is the expected impact of the scientific advances to be achieved on society in the future?

(3) Project management

For the research center to become a truly "world premier international research center," it will be essential for it to establish a highly effective management system. Essential to this will be having a dedicated center director and supporting administrative staff who recruit highly qualified researchers and personnel, reform systems and carry out other operational functions at the center. As the center's "face" and the person who gives the center an attractive persona within the international community, in addition to leading the research activities of the center, the director should be an especially distinguished researcher in the subject field, who is capable over his/her 10-year tenure in this position of exercising highly effective leadership and of inviting outstanding researchers to the center from around the world. To provide the center director with strong administrative and managerial support, an administrative director is to be appointed to perform such tasks as maintaining an environment in which researchers can comfortably advance their work.

To enable flexible and swift decisions with regard to the center's management and operation, the center director should be given authority to make all operational decisions, except for final decisions on hiring or dismissing the center director.

(4) Researchers and other center staff

To be established as "globally visible," the research center will need to have a physical concentration (or core) of pivotal researchers on a certain scale, who possess a high research level. This new core should be established within the host institution. Regarding staffing, the core should use the followings as a yardstick taking into account the examples of other internationally renowned research centers:

- a. At least 7-10 of the world's top principal investigators (full professors, associate professors or others of comparable standing) including highly qualified foreign researchers invited from abroad, researchers within the host institution, and researchers invited from other Japanese institutions. Especially in the case of the PIs, at least 20% of them should be foreign researchers invited from other countries. New systems that provide them with an employment scheme and full support should be put in place so as to allow them to conduct and advance their research activities at the center even under conditions when interaction with others is limited.
- b. A total of at least 70-100 staff members as a target, including young postdoctoral researchers, research support staffs, and administrative employees.
- c. When establishing the center, securing diversity should be considered such as in creating gender balance among its researchers and its research support staffs.
- d. At all times, at least 30% of the researchers should be from overseas.

- e. At least half of the principal investigators who form the core of research center should rank among the world's top researchers as measured by, for example, the following indicators:
 - i) International influence; e.g. a) guest speaker, chair, director, or honorary member of a major international academic society in the subject field, b) member of a scholarly academy in a major country, c) recipient of an international award, d) editor of an influential journal
 - ii) Receipt of large-scale competitive research funds
 - iii) Number of paper citations

With such a core as the center's nucleus, it should be possible to strengthen and expand the center's overall capability by forming organic linkages with other domestic and/or overseas institutions, including arrangements for the efficient joint use of facilities and equipment, accomplished by such means as setting up satellite functions.

(5) Research Environment

To ensure that world's top researchers from around the world can work comfortably in carrying out their research within an international and competitive environment, measures such as following should be taken:

- a. Provide an environment in which researchers can work comfortably on their research by exempting them from duties other than research and related educational activities, and providing them with adequate staff support to handle paperwork and other administrative functions. Consideration should be given and arrangements made for researchers to participate in the education of graduate students.
- b. Provide startup research funding as necessary to ensure that the world's top researchers invited to the center can get a robust start on their research work.
- c. As a rule, fill postdoctoral positions through open international solicitations.
- d. Establish English as the primary language for work-related communication, and appoint administrative personnel who can facilitate the use of English in the work process.
- e. Adopt a rigorous system for evaluating research and a system of merit-based compensation. (For example, institute a merit-based annual salary system.)
- f. A facility and equipment environment, including laboratories and living quarters, should be established on a standard suitable for a top world-level research center. Measures, such as the digital transformation of the research environment, should be carried out in a flexible manner so as to facilitate the conducting and advancing of research activities even under conditions when interaction with others is limited. A hardy research environment should be established and new research methodologies introduced so as to prompt further implementation of international joint research while raising research productivity.

g. Hold international research conferences or symposiums regularly (as a rule, at least once a year) to bring the world's top researchers together at the center.

(6) Level of the center vis-à-vis other world-leading research centers

At the time the funded project will start, assess the level of the center relative to other worldleading research centers in the same or related domains. Set concrete goals for the center to achieve a top-world level through the implementation of its program.

(7) Securing research funding

To support the center's operations and its research activities, additional resources that match or exceed the amount of the WPI project grant should be secured. Resource examples: competitive research funds obtained by the center's researchers, in-kind contributions and other forms of assistance by the host institution (including payment of salaries, provision of research space), external donations.

(8) Sharing of societal significance and value of basic research

Regarding the contents and results of research conducted at the center: The societal impact of the center's research along with the societal significance and value of its results should be widely disseminated in a way that is easily understood even by the general public, not only in a manner geared to research institutions in and outside Japan including private corporations. (This should be done in line with the research objectives established in paragraph 2, "Research objectives.")

(9) Fostering the next generation of researchers

Fully utilizing the activities and functions of the center, effort should be made to foster excellent young researchers including doctoral students. The center should establish a plan with concrete goals for fostering young researchers, one that includes their acquisition of skills and a career paths from enrolment in an institute of higher education to a job in the workplace. These goals are to be met through the young researchers' participation in the top world-level activities and research environment of the center's research project

(10) Establishing an independent research center in sync with reform of the host institution's existing organization

Proposals are sought for the establishment of new centers that will achieve independence within 10 years in sync with reform of the host institution's existing organization.

In addition to funds for establishing and maintaining the center, resources, including personnel, facilities and equipment, should be allocated in support of the center as an independent institute over a long term after the WPI funding ends. When proposing the center project, the host institution should provide a concrete plan and schedule based on internal adjustments for securing the mid- to long-term operation of the center including restructuring its existing organization to accommodate the center and acquiring funds to support the center's operation.

An example of this process would be the systematic redistribution of posts to the new center by such means as adjusting or integrating existing organizations or systems of the host institution based on a mid-to-long-term strategic operational plan and the provision of research space by adjusting the host institution's research activities. Host institutions are expected to include these factors in their proposal, which is to provide for the quick startup of the center and its stable operation after the WPI grant period ends.

6. Host institution's commitment

For the center to become a truly "world premier international research center" and independent by the time WPI support ends, the host institution must clearly define the center's role within its own mid-to-long-term strategy and provide its comprehensive support from the time that the funded project starts.

When applying for the grant, the host institution should describe its commitment with respect to the following eight concrete terms. These commitments will not only be taken into consideration in the application screening process, but will also be used later to assess the state of the project's progress.

- (1) Providing a mid-to-long-term policy on the direction of the host institution's organization and operation, one that includes the reform of the institution's existing organization in ways that will achieve the center's independence and create a permanent place for it within the organization. A concrete plan and schedule must be set and carried out for restructuring the host institution's organization.
- (2) Providing sufficient support for carrying out the center's operation and research activities, including necessary personnel, financial, and system support. (During the project's implementation period, the center is expected to acquire funding from other sources in an amount that is equivalent or greater than the WPI grant.)
- (3) Providing necessary support for the center to carry out its operations independently and to sustain itself as a top world-level research institute after the period of WPI funding ends. This includes the allocation of resources (e.g. personnel, facilities and equipment) needed for the center's long-term operation. Also, the host institution should secure and/or provide the center with infrastructure needed to carry out its activities (e.g. land, research facilities and

- equipment, and research space) at an early stage of its establishment on the premise that the infrastructure continues to be secured for the center after WPI funding ends.
- (4) Providing a governance system in which decision making on hiring personnel and spending funds effectively rests on the director so as to ensure a necessary degree of autonomy in the management of the center.
- (5) Providing support to the center director by coordinating with other departments regarding the assigning of researchers to the center and the creating of an effective environment for the center within the host institution. Needed adjustments to do so should be made proactively while giving consideration to their effect on the educational and research activities of those departments.
- (6) Offering cooperation in flexibly applying, revising, or supplementing the host institution's internal systems as needed for the center to effectively implement new management methods unfettered by conventional modes of operation (e.g. English-language environment, merit-based pay, top-down decision making, linkage to graduate school education).
- (7) Providing other types of assistance to give the center maximum support in achieving its concepts and objectives and in becoming a world-premier international research center in both name and deed.
- (8) The host institution is to self-evaluate the results of system reforms achieved by the center and distribute the highly evaluated results to all of its departments.

7. Formulating project proposals

Based on the center project plan devised under the leadership of the center's director candidate, the head of the host institution (e.g. university president, chairperson of the board) is to prepare a project proposal along with a plan on the host institution's commitment articulating in specific terms as described in section 6 above, and submit it jointly signed with the center's director candidate. Inasmuch as funding under this program will be provided in the form of an institutional grant to the host institution, its head has final responsibility for implementing the entire project. The proposal should not be limited to activities supported by this program grant but should be both comprehensive and long-term in scope covering independent initiatives taken by the center, host institution, and partner institutions and include activities to be conducted after the grant period has ended.

When preparing their project proposals, applicants should also draw up a concrete plan detailing those aspects of center operations deemed eligible for appropriations under the program grant (hereafter referred to as "Appropriations Plan").

8. Expenditures

- (1) As a rule, grant funds provided under this program may be used only for the categories of expenditures described in Attachment 2.
- (2) Funds needed to realize the Appropriations Plan are provided by MEXT in the form of a WPI grant.
- (3) With regard to the Appropriations Plan, expenditures should be in principle ¥700 million for each fiscal year with a total of ¥7 billion as the maximum amount for the 10-year period (FY 2022 2031). From the center's sixth year of operation, the center's public funding will be gradually reduced with an aim to encourage its independence. The amount of reduced funding will be deducted from the center's established Appropriations Plan. However, full consideration will be given to the results of the centers' fifth-year interim evaluation and the host institutions' efforts toward securing the autonomy of the centers in determining funding allocations. For extraordinarily outstanding centers, the amount of project funding may be adjusted with special consideration.

This call for proposals will be valid if the budget for the FY2022 program is given the Diet's final approval. The amount of the center's annual funding may be adjusted pursuant to conditions related to securing a budget for that fiscal year.

9. Selection of institutions

(1) Review process

MEXT will select the center to be supported via a 3-stage screen process comprising a two-tier document review and a hearing with the center's director candidate and the head of the host institution by WPI Program Committee (hereafter referred to as the "Program Committee"), made up of experts, including overseas specialists, from outside the ministry. Details on the screening process, evaluation items and screening criteria are provided separately in the Review Guidelines.

(2) Evaluation items and criteria

- a. Proposal content
 - Does the proposed center project meet all the requirements stipulated in section 5 above, and are its contents appropriate?
 - Does the commitment provided by the host institution meet all the requirements stipulated in section 6 above, and are its contents appropriate?
 - Will sufficient effort be made to sustain the center as a top world-level research center after program funding ends?
 - Does the scheme and concept for building a top world-level research center have the power to attract the world's top researchers from around the world?

b. Ripple effect

 Does the proposed center project have trailblazing components that other departments of the host institution and/or other research institutions can refer to when attempting to build their own top world-level research centers?

c. Funding plan

- Is the proposed Appropriations Plan reasonable, and does it reflect efforts toward achieving a cost-effective operation?
- (3) Selection of projects may be accompanied by recommendations for improving the project proposal, including the Appropriations Plan and/or the host institution's commitment, based on opinions expressed by the Program Committee members and other authorities.

10. Implementation

- (1) The Selected host institution shall revise its project proposal, when required, based on the recommendations described in section 9 (3) above, and submit its revised proposal together with a Japanese version to MEXT. After review, MEXT may recommend further revisions.
- (2) The host institution is to compile annual reports on the progress of the project's implementation and its use of the grant funds, and submit them to MEXT.
- (3) To maintain networks that will enhance exchange within the community, the selected center is to collect information on the affiliated institutions of researchers and other personnel and their positions in those institutions before they became members of the center and after they transfer out of the center.
- (4) Established under the Program Committee are a program director (and deputy program director) to oversee the entire WPI program, program officers for each center project, and working groups of experts led by the program officers, who will review the reports described in paragraph (2) above and conduct site visits to verify the progress of the center project. Should any aspect of the project's implementation, including the host institution's commitment, be deemed inadequate relative to the materials submitted pursuant to paragraph (1) above, MEXT will request the head of host institution and the center director to take necessary corrective measures.
- (5) From the standpoint of accountability to the public and society, in addition to the regular conducting of outreach activities, the result of the project's 10th year implementation are to be widely disseminated to the public after its final evaluation is carried out.
- (6) Should a need arise to make a change in the important elements of the project (items required in the Grant-decision Notice as stipulated in Section 6.1 of the Funding Guidelines for World Premier International Research Center Initiative), the center director and the head of host institution shall promptly apply to MEXT, the program director, deputy program director, and assigned program officer for approval to make the change. MEXT will refer requests for changes

to the Program Committee when necessary, and approve them only after verifying that they conform to the selection criteria stipulated in section 9 above.

In the event of any other changes occurring in the project proposal, including the Appropriations Plan and the host institution's commitment, they shall be report to MEXT right away.

11. Important points to keep in mind

(1) Important points regarding grant execution

a. Implementation and management of grant projects

Proper accounting and other financial management practices must be applied in the use of this grant, in conformance with such statutes as the "Act on Regulation of Execution of Budget Pertaining to Subsidies, etc." and the "Order for Enforcement of the Act on Regulation of Execution of Budget Pertaining to Subsidies, etc."

Accounting for this program shall be clearly separated from other accounts, with items of income and expenditure recorded in an accounting ledger and supported by documentation. The ledger and supporting documents shall be retained by the grantee for a period of 5 years from the year following the fiscal year in which each subsidy is received.

When equipment is purchased with grant funds, it is to be managed and maintained by a capable manager. Care should be taken to use the equipment efficiently in line with the purpose of the grant, not only for the duration of the project but after it ends, on the grounds that it has been purchased with grant funds allocated from the national treasury.

- b. Actions against misuse of grant funds
 - Should misuse or other inappropriate behavior be found to have occurred with regard to the grant funds, MEXT will require that all or part of the grant be refunded and will restrict the researcher(s) involved from participating in the WPI program for a given period of time, as indicated below.
 - i) In the event of grant misuse: suspension for a period of 2 years from the year following the fiscal year that a refund is demanded, except for case (ii) below.
 - ii) In the event that grant is misused or misappropriated for purposes other than this program: suspension for a period of 2-5 years from the year following the fiscal year that a refund is demanded, as deemed appropriate given the substance and circumstances of the violation.
- c. System operation within research institution based on "Guidelines on the Managing and Audit of Public Research Funds at Research Institutions (Implementation Standards)"

When applying for a grant and implementing a project under this program, the research institution must comply with the provisions of the "Guidelines on the Managing and Audit of

Public Research Funds at Research Institutions (Implementation Standards) (*1)" (Revised on February 1, 2021).

Research institutions must establish a management and auditing system for public research funds that complies with the content of the Guidelines, and strive to properly execute those funds.

When, as a result of an investigation carried out under these Guidelines, MEXT finds inadequacies in the state of an institution's funds-management system, it may reduce the amount of its indirect funding from all its competitive research funds received from MEXT and/or independent administrative institutions under MEXT's jurisdiction, or take other measures.

(*1) Please refer to the following website for the "Guidelines on the Managing and Audit of Public Research Funds at Research Institutions (Implementation Standards)"

https://www.mext.go.jp/a menu/kansa/houkoku/1343904 21.htm (Japanese website)

d. Submission of a "Self-Assessment Checklist on the Improvement of the System and Other Matters," based on the "Guidelines on the Managing and Audit of Public Research Funds at Research Institutions (Implementation Standard)"

When receiving a grant under this program, each research institution is required to establish its own financial management and auditing system based on the above-titled Guidelines and to submit the report Self-Assessment Checklist on the Improvement of the System and Other Matters" (hereafter called the "Check List") to MEXT on its implementation status. If the Check List is not submitted, the grant will not be issued.

Accordingly, research institutions must check the notice regarding the Check List on MEXT's webpage after 1 April 2022 and download its FY2022 format via the Cross-Ministerial R&D Management System (e-Rad). A completed Check List must be submitted to MEXT's Office for Competitive Research Funding Administration, Research Environment Division, Science and Technology Policy Bureau by uploading it via e-Rad before the grant-decision is made. Institutions other than those receiving competitive research funds from MEXT and/or from independent administrative institutions under MEXT's jurisdiction need not submit the Check List.

For further details on how to submit the Check List, please see the following MEXT webpage after 1 April 2022; information posted on the webpage before then covers the FY2021 format of the Check List.

MEXT website: https://www.mext.go.jp/a menu/kansa/houkoku/1324571.htm

Note: To submit the Check List, it is first necessary for the research institution to register onto the e-Rad system. Note that it usually takes about two weeks to complete the registration process. For detailed information on e-Rad system usage, please see the following website: https://www.e-rad.go.jp/organ/index.html

Perspectives on promoting information dissemination and sharing are included in the abovementioned Guidelines. With reference to them, research institutions should post and widely disseminate their own measures for preventing misuse or other inappropriate behavior.

e. Establishing countermeasures for research misconduct based on the "Guidelines for Responding to Misconduct in Research"

When applying for a grant and/or implementing a research project under this program, research institutions must follow the "Guidelines for Responding to Misconduct in Research" (Adopted by MEXT on 26 August 2014) (*2)

When, as a result of an investigation carried out under these Guidelines, MEXT finds inadequacies in the state of the countermeasures taken by an institution for research misconduct, it may reduce the amount of its indirect funding from all its competitive research funds received from MEXT and/or from independent administrative institutions under MEXT's jurisdiction, or take other measures.

(*2) Please refer following website for the "Guidelines for Responding to Misconduct in Research."

http://www.mext.go.jp/b menu/houdou/26/08/1351568.htm

f. Submission of "Checklist Pertaining to the Current Status" based on the "Guidelines for Responding to Misconduct in Research"

When receiving a grant under this program, each research institution is required to submit a Checklist Pertaining to the Current Status of its research misconduct countermeasures based on the "Guidelines for Responding to Misconduct in Research" (hereafter called the "Misconduct Check List") to MEXT. If this Misconduct Check List is not submitted, the grant will not be issued.

Accordingly, research institutions must check the announcement regarding the Misconduct Check List on MEXT's webpage after 1 April 2022 and download its FY2022 format via e-Rad. A completed Misconduct Check List must be submitted to MEXT's Office for Research Integrity Promotion, Research Environment Division, Science and Technology Policy Bureau by uploading it via e-Rad before the grant-decision is made. Institutions other than those receiving allotment or provision of a budget for their research activities from MEXT and/or

from independent administrative institutions under MEXT's jurisdiction need not submit the Misconduct Check List..

For further details on the Misconduct Check List, please see the following MEXT webpage after 1 April 2022; information posted on the webpage before then covers the FY2021 format of the Misconduct Check List.

https://www.mext.go.jp/a menu/jinzai/fusei/1420301 00001.htm

Note: To submit the Misconduct Check List, it is first necessary for the research institution to register onto the e-Rad system. Note that it usually takes about two weeks to complete the registration process. For detailed information on e-Rad system usage, please see the following website:

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

g. Measures against misconduct in research based on the "Guidelines for Responding to Misconduct in Research"

Should misconduct in research be found to exist under this program, MEXT will enact strict penalties against the center, as indicated below.

(i) Measures such as cancellation of grant decision

Should specific misconduct in research (fabrication, falsification, plagiarism) be found to occur under this program, MEXT will take such measures as cancelling or amending its decision on issuing the WPI grant and/or require the center to refund all or part of the grant. There can also be cases when the center's grant is not be renewed in the following fiscal year.

(ii) Restriction on grant application and project participation

With regard to persons who willfully committed a particularly malicious act of misconduct or who, though not involved in the misconduct, are determined to have a certain degree of responsibility for neglecting their duties to prevent misconduct in papers or reports under this program, MEXT may rescind or restrict their eligibility to apply for a grant and/or participate in grant-funded projects.

If such a restriction is imposed on a researcher's eligibility, MEXT will inform the section responsible for competitive research funds in MEXT and in other government ministries and in the independent administrative institutions under their jurisdictions. Consequently, the restriction on grant application and project participation will apply to competitive research funding programs administered throughout the government.

concerning sp	ns (researchers) ecific research i alsification, plag	misconduct giarism)	Degree of Specific Research Misconduct	Restricted Period from applying for grants (from the fiscal year following the year that the misconduct was confirmed*3)
	,	e.g. intention to onduct from the		10 years
Researchers	2. Author(s) of paper(s), etc. related to the research	Responsible author(s) of paper(s) in question (corresponding author, lead	Cases where it is judged that the impact of the misconduct on research progress in the subject field is large and the social impact is major, and/or the level of maliciousness involved is high	5-7 years
participating in specific misconduct	in which research misconduct has been identified	author or other authors bearing equivalent responsibility)	Cases where it is judged that the impact of the misconduct on research progress in the subject field is small and the social impact is minor and/or the level of maliciousness involved is low	3-5 years
		Authors other than the above		2-3 years
	the research	o participated in misconduct ose in 1. or 2.		2-3 years
Responsible author(s) of paper(s), (corresponding author, lead author or other authors bearing equivalent responsibility) for which research misconduct is identified, but not involved in the alleged research misconduct		Cases where it is judged that the impact of the misconduct on research progress in the subject field is large and the social impact is major, and/or the level of maliciousness involved is high	2-3 years	

	Cases where it is judged that the impact of the misconduct on research progress in the subject field is small and the social impact is minor and/or the level of maliciousness involved is low	1-2 years
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^{*3} In addition, grant application and grant-project participation eligibility will also be suspended for the rest of the fiscal year in which the specific misconduct was confirmed.

(iii) Measures regarding researchers who have been restricted from applying for or participating in competitive research funding programs

If restrictions have been imposed on a researcher's eligibility as a result of specific misconduct under a competitive research funding program administered by the government or an independent administrative institution, MEXT shall restrict said researcher's participation in the WPI Program for the duration of the ineligibility imposed by the other program.

(iv) Disclosure of relevant information on research misconduct

If misconduct in research is found to occur under the program, MEXT shall, in principle, disclose relevant information regarding the misconduct (e.g., case name, category of misconduct, field of research in which the misconduct is identified, name of funding program, outline of the case, measures taken by the research institution and funding organization).

When a research institution confirms misconduct in research, it must immediately disclose the facts in accordance with the Guidelines for Responding to Misconduct in Research.

http://www.mext.go.jp/a menu/jinzai/fusei/1360483.htm (in Japanese)

h. Compulsory education on ethics in research and compliance

Researchers taking part in this program are required to complete a course in ethics education as stipulated in the "Guidelines for Responding to Misconduct in Research" in order to prevent misconduct, and in compliance education as stipulated in the "Guidelines on the Managing and Audit of Public Research Funds at Research Institutions." When their proposed center project plan is selected, the head of the host institution and the center director must submit a document to MEXT confirming that all of the researchers participating in the program have completed the required educational courses both on research ethics and on compliance, and stating that they understand the contents of these courses.

i. Security Export Control Policy (Prevention on Technological Leakage)

Many research organizations are carrying out leading-edge research and in the process of their internationalization are increasing the number of foreign students and overseas researchers that they host, which is causing an outflow of advanced technologies, research materials, machinery components and other items that can be misused in developing and producing of weapons of mass destruction (WMD). Accordingly, when research activities are carried out at WPI centers, their host institutions are to take systematic measures to prevent the leakage of the research results to WMD developers or terrorists.

In Japan, export controls (*4) are carried out under the Foreign Exchange and Foreign Trade Act (Act No. 228 of 1949) (hereinafter referred to as "Foreign Exchange Law"). Therefore, in principle, in order to export (provide) cargo and technology regulated by the Foreign Exchange Law, it is necessary to obtain permission of the Minister of Economy, Trade and Industry.

Beginning with the Foreign Exchange Law, Japan's laws and regulations, guidelines and directives are to be strictly observed. If they are violated when carrying out research, penalties and punishments will be imposed per those laws and regulations, grant funding will be stopped, and the grant disbursal decision retracted.

(*4) Japan's Security Export Control System established on the basis of international agreements mainly consists of ①"List rules" which require permission of the Minister of Economy, Trade and Industry in principle when exporting cargo or providing technology that carry specifications and/or functions higher than certain levels, such as carbon fiber and numerically controlled machine tools, etc., and ②"Catch-all regulation" which requires permission of the Minister of Economy, Trade and Industry when exporting cargo or providing technologies that are not subject to regulation under the List rules but do fall under certain regulatory requirements (application requirements, consumer requirements and/or informed requirements).

Not only the export of cargo but also provision of technology is subject to regulation under the Foreign Exchange Law. When providing "List rules" technology to nonresidents or providing it in a foreign country, prior permission for such provision is required. "Provision of technology" includes not only providing technical information such as design drawings, specifications, manuals, samples, and prototypes via storage media such as paper, mail, and CD, DVD, USB memories, but also providing working knowledge and technical assistance at seminars through technical instruction, skill training, etc.

Researchers should be aware that there may be cases in which technologies subject to regulation under the Foreign Exchange Law are involved when mentoring foreign students and/or conducting joint research activities with overseas groups.

The details of the Security Export Control Policy are provided on the website of Ministry of Economy, Trade and Industry.

•Ministry of Economy, Trade and Industry: Security Trade Control (General) Division http://www.meti.go.jp/policy/anpo/

- Ministry of Economy, Trade and Industry: Handbook of Security Export Control Policy http://www.meti.go.jp/policy/anpo/seminer/shiryo/handbook.pdf (only in Japanese)
- Center for Information on Security Trade Control http://www.cistec.or.jp/english/index.html
 - •Guidance for Sensitive technology management regarding the Security Export Control Policy (for universities and research institutes)

 http://www.meti.go.jp/policy/anpo/law_document/tutatu/t07sonota/t07sonota_jishukanri03
 .pdf (in Japanese)
- j. Strict Implementation of United Nations Security Council Resolution 2321

In the face of the nuclear test by Democratic People's Republic of Korea (DPRK) in September 2016 and repeated launches of ballistic missiles, the United Nations Security Council adopted the United Nations Security Council Resolution 2321 on November 30, 2016 (ET, New York) deciding to impose additional and stronger sanctions on DPRK. In this regard, MEXT issued a letter of request entitled, "Strict Implementation of United Nations Security Council Resolution 2321 (Request)" (28 受文科際第 98 号) to relevant organizations as of February 17, 2017.

"Scientific and technical cooperation" as set forth in Paragraph 11 in the main text of the Resolution not only includes technologies regulated by the Foreign Exchange and Foreign Trade Act of Japan, but all cooperative activities except for medical exchanges. Therefore, it is critical that research institutions exercise strict implementation of the Resolution when conducting various research activities in WPI centers.

The UNSC Resolution 2321 can be found at:

•MOFA: United Nations Security Council Resolution 2321, Japanese translation (MOFA Notice No. 463 (issued on December 9, 2016) https://www.mofa.go.jp/mofaj/files/000211409.pdf

k. Violations of relevant laws and statutes

In the event that falsified information is contained in the grant application materials or the center project is carried out in such a manner that violates relevant laws, statutes or guidelines, the grant award may be withheld or canceled.

(2) Public release of information

MEXT will release the names of the applying host institutions, of center projects, and of the center's director candidates at the time their applications are received. Regarding each project selected for a grant, MEXT will release additional information and an abstract of the proposed project.

(3) Miscellaneous

Applicants may not seek duplicate funding through this program for costs covered now or in the future by other grants from government or other organizations.

12. Application procedure and calendar

(1) Application procedure

For details on the application procedure, please see the following website. https://www.jsps.go.jp/j-toplevel/01_koubo.html (Application forms and documents can be downloaded from this website.)

(2) Schedule

Submission deadline for application documents (1st screening): 5 p.m. 29 March 2022 * Submission deadline for application documents (2nd screening): 5 p.m. 1 June 2022 * (*must arrive at JSPS by the deadline)

3rd selection (tentative): September 2022 Start of project (tentative): October 2022

Attachment 1

WPI New Missions (December 2020, WPI Program Committee)

New Missions, Perspectives, and Evaluation Criteria

Missions	Perspectives	Evaluation Criteria (Examples)
World-Leading Scientific Excellence	 The Highest Level of Research Impact 	 Research Impact: Comparison with benchmark institutes; Impact Factors, Citations (Top 1%/10%)
and Recognition	Expanding Knowledge Frontiers through Interdisciplinarity and	 Metrics derived from research fronts (highly-cited papers clusters)
	Diversity	 Diversity of center personnel (in terms of internationality and gender)
		[Narratives regarding scientific achievements]
 Global Research Environment and System Reform 	Harnessing Talent and Potential through Global Brain Circulation	 International collaborations; Top researchers/Postdocs exchanges; World- class research meetings; Presence of foreign researchers
	organizational Capacity Building Fffective, Proactive and Agile	 Disciplinary diversity of research environments and outputs (teams, articles, journals)
	Management	 Host institutions' efforts for making system reforms
		 [Narratives regarding practices]
• Values for the Future	Societal Value of Basic Research	 Societal impact of social sciences and natural sciences
	 Human Resource Building: Higher Education and Career 	 Rolling out the best practices; Contributions to higher education reform
	Development • Self-sufficient and Sustainable	 Branding strategy for the WPI program and host institutions; Outcomes of outreach activities
	Center Development	[Narratives regarding practices]

Attachment 2

1. Allowable Costs

(1) Personnel Costs (Excluding costs covered under research project funding)

The grant may not be used to pay remunerations, retirement allowances or statutory welfare costs to board members of the host institution or other organizations.

- The grant may be used to pay compensation to personnel (hereafter called "staffs and others") participating in the center project who have work contracts with the host institution or other organizations in the form of wages, salary, allowance, bonus, etc. (hereafter called "wages").

The following may also be covered with the grant:

- Money considered to be wages in funds dedicated to staffs and others' welfare
- Payment of retirement allowances to staffs and others
- Payment of statutory welfare costs for staffs and others
- The following expenditures are excluded, even when coinciding with the above items:
 - -- Payment of bonuses/retirement allowances or bonus allowances/retirement benefit allowances for periods other than those worked by the staffs and others at the research center.

(2) Project Activities Costs (Excluding costs covered under research project funding)

The grant may be used under this category to cover costs required to implement the center project, excluding personnel, travel and facility/equipment costs. These include:

- Items used by multiple researchers and staffs and placed in lot contracts by universities and research institutions for cost-effective purposes, and whose cost sharing is stipulated by regulation
- Items stipulated by law or regulation as necessary in project implementation, such as medical examinations and film badges for workers whose main duty is in the center project
- Start-up cost for researchers whose main duty is in the center project
- Costs of leasing land, buildings and attached facilities and other structures used by the host institution in implementing the center project (when usage or other fees are stipulated by the host institution or in contracts)
- The cost by the research center of using assets that are the property of the host institution (when usage or other fees are stipulated by the host institution)
- The cost of statutory inspections on assets used in the center project or possessed by the host institution (e.g., maintenance inspections of fire-extinguishing equipment) and automobile weight taxes
- The following expenditures are excluded, even when coinciding with the above items:
 - -- Costs for welfare, except for those considered to be wages
 - -- Fellowships and grants for doctoral students and similar support
 - -- Luxury food and drink, including alcoholic beverages, served at receptions accompanying international research meetings held by the research center
 - -- Indemnity insurance (except for the repair of damaged property/assets indispensable to the implementation of the center project), attorney fees, damage reparations and other costs related to the occurrence of accidents or disasters.

(3) Travel Costs (Excluding costs covered under research project funding)

Costs of international and domestic travel, including train fees, per diem and lodging, required in implementing the center project.

(4) Facility/Equipment Costs (Excluding costs covered under research project funding)

- The grant may be used to cover tangible capital expenditures that are essential and fundamental to implementing the center project, including machinery and devices and attached facilities, equipment, tools, instruments, fixtures and books. The purchase, manufacture, lease, reform, repair and installation of such facilities and equipment are also covered.
- Capital expenditures are covered when related to the renovation and repair of buildings, attached facilities and other structures necessary for implementing the center project, including the installation of attached facilities (costs related to the renovation of buildings or facilities when machinery, devices or other equipment necessary for implementing the center project are installed; costs related to the installation and maintenance of staff rooms and laboratories.)

The following items are not covered:

- Capital expenditures for purchasing or leasing land, buildings, attached facilities or other structures used in implementing the center project.

(5) Other Expenditures Approved by the Minister of Education, Culture, Sports, Science and Technology. (Excluding costs covered under research project funding)

Some costs not specifically covered by the grant may be specially authorized for use by the Minister of Education, Culture, Sports, Science and Technology.

* Research Project Funding
Funding necessary for implementing within the center research projects based on concrete
R&D topics

2. Examples of Eligible Costs

The following are examples of allowable use of the grant's cost component:

- Costs required for inviting researchers to the center, including their startup research funding, compensation, housing allowance, children's educational allowance.
- Costs required to support talented young researchers, such as postdoctoral researchers
- Compensation of research support staffs, research assistants and administrative staffs
- Costs required to carry out joint research with partner institutions
- Costs of outreach activities including holding international research conferences and similar meetings
- Costs to secure space for satellite functions
- Costs of developing, installing, and operating cutting-edge equipment necessary to the project
- Costs of travel and lodging for researchers attending research conferences and similar meetings