World Premier International Research Center Initiative (WPI) FY2012 Application Guidelines

1. Purpose of program

To enhance 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. To this end, Japan needs to create research centers in which world's finest brains gather, outstanding research results are generated, and talented young researchers are fostered. These centers should be highly innovative in both their concepts and practices, unfettered by conventional thinking.

This program provides priority support for proposals aimed at creating world premier international research centers staffed at their core with the world's most leading researchers. By achieving a very high research standard and providing an excellent research environment, the centers should be "globally visible research centers," able to attract top-level researchers from around the world.

To this end, the program intends to provide financial support for the measures aimed at physically assembling outstanding researchers and realizing such 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 researchers.

This time, the WPI program will be expanded by about three center projects aimed at creating world premier international research centers by focusing on sharp, cutting-edge research fields, with the perspective of spreading the system reform heretofore advanced under the program to other institutions. Project proposals that will exploit their previous efforts of center-building initiatives are also encouraged to apply.

2. Eligible applicants: Host institutions (core institutions seeking to build a world premier international research center under this program), namely:

Universities

Inter-university research institutes

Independent administrative institutions (IAIs)

Public interest corporations (PICs)

(As this solicitation seeks to spread the WPI system reform, the institutions that have already been selected under this program are not eligible to apply.)

3. Number of awards:

Approximately three

4. Implementation period

10 years, with possible 5-year extension if the project achieves outstanding results.

An interim evaluation will be carried out five years after the project starts. The project may be revised or terminated early depending on the results of the evaluation.

5. Concepts and requirements of eligible projects

To be eligible, proposals must place importance on "people" (e.g., researchers and staff) while providing a scheme to form an international research center under the mid-to-long-term vision of the center's director. Proposed projects must satisfy the following (1)-(7) requirements, providing a clear description of the steps and timetables to meet them. Projects that will exploit the previous efforts of center-building initiatives must also fulfill the conditions stipulated in item (8).

(1) Research field

A focused, cutting-edge field of basic research, including one aiming at the transition from basic to applied research, that, in principle, fuses different fields and can be expected to pioneer innovative scientific domains of future importance.

The characteristics sought for this focused research field are (i) a field in which Japan's expertise can excel, (ii) a field that seeks to resolve world-level scientific and/or technological issues and has international appeal, (iii) a field that can stand continuously at a top world level by perpetually and strategically spawning related new domains in ways that the field may sustain the future capacity over the relatively long project-funding period of ten years.

With such a focus enabling the center project to exercise sharp strategies, implement agile yet bold management including recruitment, and gain an international recognition for the center's distinctive character, the creation of world premier international research centers will be sought.

(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 easily understandable manner so as to clearly convey the focus of the center's research to the public.

In describing the objectives, the following should be articulated in an easily understandable manner: What kind of research area do you plan to open up by, for example, 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 reach a truly top world level, it will be essential for it to establish a highly effective management system. Essential to this will be having a center director and supporting administrative staff who can devote full time to recruiting highly qualified researchers and personnel, reforming systems and carrying out other operational functions. As the center's "face" and the person who gives the center an attractive persona within the international community, the director should be a distinguished researcher in the subject field, one capable of exercising highly effective leadership and inviting outstanding researchers to the center from around the world. To provide the 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 devote themselves fully to their work.

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

(4) Researchers and other center staff

To be "globally visible," the research center will need to have a physical concentration (or core) of researchers of a certain scale, one that possesses a high research level. This 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 world-class principal investigators (full professors, associate professors or others of comparable standing), at least 10-20% of whom are foreign researchers invited from abroad, while the remainder come from within the host institutions or are invited from other Japanese institutions.

- b. A total of at least 70-100 staff members as a target, including young postdoctoral researchers, research support staffs, and administrative employees.
- c. At all times, at least 30% of the researchers should be from overseas, including those on short stays.
- d. At least half of the principal investigators who form the core 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) hold a prestigious lectureship, c) member of a scholarly academy in a major country, d) recipient of an international award, e) editor of an influential journal
 - ii) Receipt of large-scale competitive funding
 - iii) Article 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 efficient joint use of facilities and equipment, accomplished by such means as setting up satellite functions.

(5) Research Environment

To ensure that top-caliber researchers from around the world can comfortably devote themselves to their research in a competitive international environment, measures such as following should be taken:

- a. Provide an environment in which researchers can devote themselves exclusively to 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.
- b. Provide startup research funding as necessary to ensure that top-caliber researchers invited to the center do not upon arrival lose momentum in vigorously pursuing their work out of concern over the need to apply immediately for competitive grants.
- 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. Provide equipment and facilities, including laboratory space, appropriate to a top world-level research center.
- g. Hold international research conferences or symposiums regularly (at least once a year) to bring the world's leading researchers together at the center.

(6) Indicators for evaluating a center's global standing

The project proposal should provide appropriate criteria and methods for evaluating the center's global standing in the subject field. They should be used to appraise how the center ranks at the beginning of the grant period vis-à-vis other global research centers, and to set goals for the project to achieve accordingly.

Note: The quality and utility of the evaluation criteria and methods adopted will be among the factors evaluated in the application review process. In the interim and final evaluations of the project, these criteria and methods will also be used to assess the degree to which the project has achieved its goals.

(7) Securing research funding

To support the center's operations and its research activities, additional resources that match or exceed the amount of the project grant should be secured.

Resource examples: competitive funding obtained by the center's researchers, inkind contributions and other forms of assistance by the host institution (including partial payment of salaries, provision of research space), external donations.

(8) Exploiting the results of previously-initiated center-building efforts

Besides completely new projects, this call for proposals also targets projects that will exploit the results of previously-initiated center-building efforts, and encourage them to apply. These are projects that, using their results as a foundation, have the potential of achieving the status of a top world-level center by combining funding from and meeting the requirements of the WPI Program. Such projects, however, should not seek to simply extend their current center-building activities. Rather, they should mix new conception to their activities in an effort to create innovative scientific domains of future importance and to yield a top world-level center.

These previously-initiated center-building efforts are the efforts having been made through the funding either from the government or other sources, and can be measured as a fiscal amount at an appropriate level to provide the foundation for becoming a WPI-supported project. Such projects are expected to strive to continue to secure the same

scale of the measured fiscal amount through independent resources after that funding eventually ends in future. Verification will be made during proposal screening as to whether the acknowledgeable expenses are allocated for the previously-initiated centerbuilding efforts.

A combination of the measured amount of the previously-initiated center-building efforts and the WPI grant constitutes the funding needed to realize the center project. (Namely, "funding needed to realize the center project" = "measured amount of the previously-initiated center-building efforts"+"WPI grant")

Expenses acknowledged as the previously-initiated center-building efforts: Personnel costs of researchers whose main duties are in the center, personnel costs of center staffs, costs of center's activities, costs of maintaining the research environment (excluding capital expenditures for purchasing or leasing land and buildings). *Namely, these are the expenses described in Attachment 1, excluding costs covered under research project funding.

6. Host institution's commitment

For the center to achieve truly top world status, the host institution must clearly define the center's role within its own mid-to-long-term strategy and provide it comprehensive support accordingly.

When applying for the grant, the host institution should describe its commitment with respect to the following in concrete terms:

- (1) How it will support the center's need to secure resources that match or exceed the project grant. In the case of project exploiting previously-initiated center-building efforts, how it will assist them in continuing to secure the same scale of the measured amount through independent resources after that funding ends.
- (2)How it will institute a system under which the center's director is able to make substantive personnel and budget allocation decisions necessary for implementing the center project—a system, which in practice, allows the center director autonomy in making decisions regarding the center's operation.
- (3) The support it will provide to the center director in coordinating with other departments within the host institution when recruiting researchers for the center, while giving reasonable regard to the educational and research activities of those departments.
- (4)Its flexibility in applying, revising, or supplementing the host institution's internal systems as needed for the center to effectively implement new management methods

- (e.g., English-language environment, merit-based pay, top-down decision making) unfettered by conventional modes of operation.
- (5) Its accommodation of the center's infrastructural requirements (for facilities, e.g., laboratory space; equipment; land, etc.).
- (6) How it will support to sustain the center as a world premier international research center after the WPI-grant period ends.
- (7) Other types of assistance it will provide to give maximum support to the center in achieving its concepts and objectives and becoming a world premier international research center in both name and deed.

7. Formulating project proposals

Based on the center project devised by the research group leader, the head of the host institution (e.g., university president, IAI director) is to prepare a project proposal along with a plan articulating in specific terms the host institution's commitment as described in section 6 above, and submit it jointly signed with the research group leader.

The research group leader (or "center director" upon his/her official appointment) shall be "chief center project officer", who has primary responsibility for implementing the center project, while the head of the host institution shall be "chief entire project officer" who has overall responsibility for the project, including carrying out the host institution's commitments (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 the entire project.). The proposal should not be limited to activities supported by this program grant or under existing center-building efforts, but should be both comprehensive and long-term in scope covering independent initiatives taken by the center, host institution, and partner institutions and include forecasted 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"). In the case of existing center-building efforts, applicants should describe both their Appropriations Plan and the plan for the existing efforts.

In conducting an open call for proposals, no limit shall be placed on the number of applications that may be submitted by each host institution.

8. Expenditures

- (1) A combination of funding necessary to implement operational components contained in the Appropriations Plan and the measured amount of the existing center-building efforts constitutes the funding needed to realize the center project. As a standard, this will be approximately 600-700 million yen or above each fiscal year. Funding necessary to implement the Appropriations Plan will be provided from MEXT as the WPI grant.
- (2) As a rule, grant funds provided under this program may be used only for the categories of expenditures described in Attachment 1.
- (3) For each center, the WPI grant will, in principle, cover costs totaling between 250-700 million yen annually. (Funding amounts vary according to the content of center projects and implementation year. The final amount of subsidy in each fiscal year may be adjusted based on national budget allocations.) Including projects that have existing center-building efforts, the actual amount of WPI grant may be adjusted based on an overall screening of the project, including a verification of the measured amount of existing center-building efforts.

This call for proposals will be valid if the budget for FY2012 is given the Diet's final approval.

9. Selection of institutions

(1) Review process

MEXT shall establish a WPI Program Committee (hereafter referred to as the "Program Committee"), made up of experts, including overseas specialists, from outside the ministry. The Program Committee will select awardees through a two-stage process consisting of document reviews of submitted application materials and interviews of the chief center-project officer and chief entire-project officer.

(2) Evaluation areas 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?
 - Can efforts to sustain the center as a world premier international research center be expected after program funding ends?
 - Does the scheme and concept for building a world premier international research center have the power to attract top-caliber 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 world premier international research centers?

c. Funding plan

- Is the proposed Appropriations Plan (including the plan for existing center-building efforts) reasonable, and does it reflect efforts toward cost-effective operations?
- (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) Selected host institutions shall revise their project proposals, when required, based on the recommendations described in section 9 (3) above, and submit their revised proposal together with the 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 it to MEXT.
- (3) MEXT will assign a program director to oversee the entire program and program officers as the chief examiners for each project and will establish under the Program Committee a working group of experts which 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 chief entire-project officer and the chief center-project officer to take necessary corrective measures.
- (4) From the standpoint of accountability to the public and society, a meeting to explain the results of the project to the general public is to be held during the fiscal year that the post-project evaluation is conducted.
- (5) Should a need arise to make a change in the center director or other important elements of the project (item required in Grant-decision Notice as stipulated in Section 6.1 of the Funding Guidelines for World Premier International Research Center Initiative), the

chief center-project officer and chief entire-project officer shall promptly apply to MEXT for approval to make the change. MEXT will refer requests for changes to the Program Committee if necessary, and approve them after verifying that they conform to the selection criteria stipulated in section 9 above.

In the event of any other changes in the project proposal, including the Appropriations Plan and the host institution's commitment, the chief center-project officer and chief entire-project officer shall report them to MEXT promptly.

11. Application process

Application under this program is to be made to JSPS. As for the application to JSPS, both the pre-application registration form and the set of required application materials are to be submitted.

(1) Application materials are submitted to JSPS

- a. Before submitting a formal application, a pre-application registration form (Attachment 2) must be submitted. It will be used in selecting referees for the document review, but will not be the subject of the evaluation itself. If this form is not received in time, the formal application will not be accepted.
- b. Application materials are to be submitted using the application forms prescribed in Attachment 3. (Formal application materials for review process should be in English, while Japanese-language versions are requested in some forms.)
- c. In making submissions, the following number of copies and addresses should be used.

Number of copies

- a. When sending pre-application registration form (English and Japanese versions): 1
- b. When sending application forms:
 - Official document: 1
 - Application materials: set of 80
 - CD-R(W) disc with electrical files of application materials (excluding the official document): 1

Addresses

- c. Submission of pre-application registration form: Email to the email address below.
- d. Submission of application forms and materials: When mailing the documents, write "WPI Application forms" in red ink on the envelope and send it with ample lead time

by a mode of mail or delivery that shows the posting. They must reach JSPS in the submitting period.

World Premier International Research Center Initiative Secretariat University-Industry Cooperation and Research Program Division Japan Society for the Promotion of Science 5-3-1 Koji-machi, Chiyoda-ku, Tokyo 102-0083, JAPAN email: jspstoplevel@jsps.go.jp

- (2) Points to bear in mind when preparing application materials
- a. Preparation of application materials: As a rule, applications will not be accepted that lack required information or those are not prepared in accordance with instructions in Application Guidelines; neither will inserts or alterations be accepted.
- b. Application materials with false or omitted entries may not be submitted to screening. If falsification is found after selection, the selection will be cancelled.
- c. To protect the interests of the applicants and comply with the Act on Protection of Personal Information Held by Administrative Organs and other statutes, submitted application materials will be used for screening and selection by MEXT and JSPS (which is commissioned by MEXT to administer the program), but not for any other purpose. Confidentiality regarding their content shall be strictly observed. (For details, see http://www.soumu.go.jp/main_sosiki/gyoukan/kanri/kenkyu.htm)

12. Important notices

(1) Important notices 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 Law for the Fair Execution of Budgets Appropriated for Subsidies and Other Grants and the Order for the Enforcement of the Law for the Fair Execution of Budgets Appropriated for Subsidies and Other Grants.

Accounting for the project 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 ground 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 misappropriation for purposes other than the project: 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. 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" (MEXT, Feb. 15, 2007.)

When contracting for 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 project's implementation will not be recognized.

The Check List must be submitted by the research institution to MEXT's Office of Research Funding Administration of the Promotion Policy Division of the Research Promotion Bureau by Tuesday 3 July 2012 via the Cross-Ministerial R&D Management System (e-Rad). For the format for filling out the Check List and for further details, see the following MEXT website:

http://www.mext.go.jp/a_menu/kansa/houkoku/1301688.htm

Note: To submit the Check List, it is first necessary for the research institution to register onto the e-Rad system. If it hasn't already done so, it should start the process right away. It usually takes about two weeks to complete the registration process. For detailed information on e-Rad system usage, see the following website:

If the Check List was already submitted in or after April 2011 when applying for other funding, a new one does not need to be submitted for this program.

After the Check List has been submitted, MEXT (including the funding agency) may, when deemed necessary, conduct a site inspection of the center's fund management/audit system, in which case your cooperation is requested. In the Check List, there are items specified as required by notice of the Director General Science and Technology Policy Bureau, MEXT (dated May 31, 2007). If problems related to those items are not properly or fully resolved by the center, its project funding may be cancelled.

d. Actions against research misconduct

In the event that a researcher is found guilty of research misconduct (fabrication, falsification or plagiarism), MEXT shall demand a refund of all or part of the grant, and shall restrict the researcher from participating in the WPI program for a given period of time, as indicated below, in keeping with the "Guidelines for Responding to Research Misconduct" (Special Committee on scientific misconduct, Council for Science and Technology, August 8, 2006).

- (i) For persons found to be involved in misconduct: 2–10 years of suspension, as deemed appropriate given the substance and circumstances of the violation.
- (ii) For persons not found to be guilty of misconduct but found to bear some responsibility for the misconduct: 1–3 years of suspension, as deemed appropriate given the substance and circumstances involved.
- e. Measures regarding researchers who have been restricted from applying for or participating in competitive funding programs

If restrictions have been imposed on a researcher's eligibility as a result of grant misuse or research misconduct under competitive 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 ineligibility imposed by the other program.

f. 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 and the number of applications per institution, the center names and the name of partner institutions at the time the applications are received. In regard to each project selected for a grant, MEXT will release additional information including the name of the chief center- project officer 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.

13. Contact information and calendar

(1)Contact

For solicitation and other application information:

Basic Research Promotion Division, Research Promotion Bureau,

Ministry of Education, Culture, Sports, Science and Technology (MEXT)

3-2-2 Kasumigaseki, Chiyoda-ku, Tokyo 100-8959, JAPAN

Tel: 03-6734-4248 (ext. 4244) Fax: 03-6734-4074

Homepage: http://www.mext.go.jp/a menu/kagaku/toplevel/index.htm

For information on application materials and the screening/evaluation process:

WPI Program Committee Secretariat

University-Industry Cooperation and Research Program Division

Japan Society for the Promotion of Science (JSPS)

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

Tel: 03-3263-0967 Fax: 03-3237-8015

Homepage: http://www.jsps.go.jp/j-toplevel/index.html

(Application forms and documents can be downloaded from these homepages.)

(2)Schedule

Submission of pre-application registration form: 10 a.m. 28-5 p.m. 31 May 2012

Submission of application materials: 2-3 July 2012

(From 10 a.m. to noon and 1 to 5 p.m.)

Notification of selection results (tentative): October 2012

Attachment 1.

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 officials affiliated with 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
- -- Funds covered by fellowships and grants that allow doctoral and master's students to concentrate on their research
- -- 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 indispensible 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 the research project, including basic, applied and developmental research based on concrete R&D topics, supported by the use of

the host institution's basic funding, competitive funding, commissioned research revenue, joint research revenue, or other funding sources.

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 research assistants and postdoctoral researchers
- Compensation of research support staffs and administrative staffs
- Costs required to carry out joint research with partner institutions
- Costs of 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

World Premier International Research Center Initiative (WPI)

Pre-application Registration Form

(Prepare two versions: in English and in Japanese)

		ν μ	To versione, in English and in Suparioss,
Host institution			
Chief entire projeinstitution) name	ect officer(Head of host e		
Chief center project officer	Name		
	Affiliation		
	Position title		
	Name		
Prospective center director	Affiliation		
	Position title		
Center name (Te words)	entative title is OK. Within 15		
	results of previously-initiated efforts?	yes	/ no
	The name of the research field		
Research field	Key words (Choose 5 words that have a close connection to the field, using as reference		
	the FY2012 keyword list of the Grants-in- Aid for Scientific Research)		
Project Summar (Within 100 words)	у		
English-language to project conce	e papers that have close relation		
	to 5 papers and attach PDF-formatted files		
		_	
Researchers in a competitive relationship with the research content deemed inappropriate to evaluate the center project (List up to 5, giving their			
Japanese.)			

 $[\]frak{X}$ Formal applications cannot be accepted if this document is not submitted.

[💥] The prospective center director and the research field may not be changed when the formal application is submitted.



World Premier International Research Center Initiative (WPI) Application Forms

NOTICE: No replacement or revision is permitted after a proposal has been submitted.

1. Summary of Proposal

(Compile two versions: in English and in Japanese. Each within 3 pages.)

(0)	ompile two versions: in English and in Japanese. Each within 3 pages.)			
Host institution				
Chief entire-project officer (Head of host institution)	Name, position title			
Chief center-project officer	 Name, affiliation, position title Before the official appointment of the center director, the research group leader is designated as the "chief center- project officer", with primary responsibility for implementing the Research Center Project. 			
Prospective center director	 Name, affiliation, and position title How does the prospective center director intend to create the center and what is his/her vision of objectives to be achieved? Provide a synopsis written by the prospective center director (free format not to be included in the 3 page limitation). 			
Center name	· Within 15 words			
Project Summary	Briefly outline the general plan of the project (within 150 words)			
Mission statement and/or Center identity	· Concisely describe the mission statement as a WPI center and/or the center identity			
Target research field	 Fill in the name of the target research field. Specifying the inter-disciplinary field(s) to which the project may be closely related. Describe the importance of the proposed target research field, including the domestic and international R&D trends in the field and Japan's advantages. 			
Research objectives	· Specify research objectives			
Outline of management	Briefly summarize the management system described in 2.Research Center Project Proposal (3) iii) iv) v)			
Researchers and other center staffs, satellites, partner institutions	 Fill in the target number of principal investigators (including number of foreign researchers), the total number of researchers (including number of foreign researchers), and the total number of staffs who will form the "core" of the research center. Indicate timing for achieving these staffing goals. List the names of main principal investigators. List the names of satellite organizations and other partner institutions. 			
Prospective administrative director	· Name, affiliation, and position title			
Outline of research environment	Briefly summarize the research environment described in 2. Research Center Project Proposal (5)			
Outline of indicators for evaluating a center's global standing	Briefly summarize the evaluation criteria/methods described in 2. Research Center Project Proposal (6)			
Securing research funding	Briefly summarize how research funding will be secured as described in 2. Research Center Project Proposal (7)			
Exploiting the results of previously-initiated center-building efforts	 If the project is completely new, state "None." In case of previously-initiated center-building efforts with government funding, enter program name and project title. In the case of project with other funding sources, concisely describe the project content. 			
Appropriations plan (Exchange Rate: JPY/USD=80)	FY 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 (\$ millions)			

1

	WPI grant	
	Funding for	
	previously-i	
	nitiated	
	center-buil center-buil	
	ding efforts	
	(if any)	
	Total	
Summary of host institution's commitment	Briefly summarize the host institution's commitment	

Note: Supplemental documents in PPT format may be attached to make the summary of the center project easier to understand (up to 10 pages, in English).

(Host institution: Center name:

2

2. Research Center Project (in English)

Host institution	
Chief entire-project officer (Head of host institution)	· Name, position title
Chief center-project officer	· Name, affiliation, position title
Prospective center director	· Name, affiliation, position title
Center name	
Project summary	 Briefly describe the general plan of the project. Include a chart that illustrates the center's overall structure including its collaborative linkages with other domestic and foreign institutions, and its management framework
Mission statement and/or Center identity	Concisely describe the mission statement as a WPI center and/or the center identity

(1) Target research field

- · Fill in the name of the target research field of the project.
- Specifying the inter-disciplinary field(s) to which the project may be closely related.
- · Describe the importance of the proposed research field, including domestic and international R&D trends in the field.
- · If centers in similar fields already exist in Japan or overseas, please list them.
- Describe why you believe that your project can satisfy the criteria of this call for proposals, especially: "a field in
 which Japan's expertise can excel," "A field that has international appeal," and "a field that can stand continuously
 at a top world level by perpetually and strategically spawning related new domains in ways that the field may
 sustain the future capacity over the relatively long project-funding period of ten years."

(2) Research objectives

• Describe in a clear and easy-to-understand manner the research objectives that the project seeks to achieve by the end of the grant period (in 10 years). In describing the objectives, the following should be articulated in an easily understandable manner: What kind of research area do you plan to open up by, for example, fusing various fields? In the process, what world-level scientific and/or technological issues are sought to be resolved? What is the expected impact of the scientific advances to be achieved on society in the future?

• Describe concretely the research plan to achieve these objectives and any related past achievements related to the proposal.

(Host institution: Center name:

(3) Management

i) Prospective center director

- Provide the name of the prospective center director, his/her age (as of 1 December 2012), current affiliation and position title, and specialties. Describe his/her qualifications to be the center director.
- · Attach a biographical sketch of the prospective center director using Appendix 2.
- If possible, attach a letter (s) of recommendation for the prospective center director from researchers with world-standard achievements in the subject field.

ii) Prospective administrative director

- Provide the name of the prospective administrative director, his/her age (as of 1 December 2012), current affiliation
 and position title. Describe his/her qualifications to be the administrative director.
- · Attach a CV of the prospective administrative director (free format).

iii) Administrative staff composition

· Concretely describe how the administrative staff is organized.

iv) Decision-making system

· Concretely describe the center's decision-making system.

v) Allocation of authority between the center director and host institution

· Concretely describe how authority is allocated between the center director and host institution.

(4) Researchers and other center staffs, satellites, partner institutions

i) The "core" to be established within the host institution

a) Principal Investigators (full professors, associate professors or other researchers of comparable standing)

	Numbers			
	At beginn	ing		
	Those exist center-	ting buildin	At end of FY 2012	Final goal (Date: month, year)
Researchers from within the host institution				
Foreign researchers invited from abroad				
Researchers invited from other Japanese institutions				
Total principal investigators				

- · Describe the concrete plan to achieve final staffing goal, including steps and timetables.
- List in Appendix 1 the principal investigators who are expected to join the center at the time of the application.
 Place an asterisk (*) by names of the investigators considered to be ranked among the world's top researchers.
 Describe the policy and strategy for inviting the rest of Pls who are to be invited in the future.

2

Center name:

- · Provide a biographical sketch of each principal investigator using Appendix 2.
- As for the researchers invited from abroad or from other Japanese institutions, attach a letter of intent from each
 of them to join the center project (free format).

b) Total members

	Numbers				
	At beg	jinning			
		Those in existing center-building project	At end of FY 2012	Final goal (Date: month, year)	
Researchers	< , %> [, %]	< , %> [, %]	< , %> [, %]	< , %>[, %]	
Principal investigators	< , %> [, %]	< , %> [, %]	< , %> [, %]	< , %>[, %]	
Other researchers	< , %> [, %]	< , %> [, %]	< , %> [, %]	< , %>[, %]	
Research support staffs					
Administrative staffs					
Total number of people who form the "core" of the research center					

- Enter number of people. For researchers, put number and percentage of overseas researchers in < >; put number and percentage of female researchers in [].
- · Describe your concrete plan to achieve the final staffing goal, including steps and timetables.

ii) Collaboration with other institutions

- If the "core" forms linkages with other institutions, domestic and/or foreign, by establishing satellite functions, provide the name of the partner institution(s), and describe the role of the satellite(s), the personnel composition and structure, and the collaborative framework between the host institution and the partner institutions (e.g., contracts to be concluded, schemes for resource transfer).
- If some of the principal investigators will be stationed at the satellites, list their names along with the name of their satellite organizations (in "Notes" of Appendix 1), and provide a biographical sketch of each using Appendix 2.
- If the "core" forms organic linkages with other institutions, domestic and/or foreign, without establishing satellite functions, provide the name of the partner institutions and describe their roles and linkages within the center project.

(5) Research Environment

- · Concretely describe measures to be taken to satisfy each of the requirements stated below, including steps and timetables.
 - i. Provide an environment in which researchers can devote themselves exclusively to 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.
- ii. Provide startup research funding as necessary to ensure that top-caliber researchers invited to the center do not upon arrival lose momentum in vigorously pursuing their work out of concern over the need to apply immediately for competitive grants.
- iii. As a rule, fill postdoctoral positions through open international solicitations.

- iv. 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.
- v. Adopt a rigorous system for evaluating research and a system of merit-based compensation. (For example, institute a merit-based annual salary system)
- vi. Provide equipment and facilities, including laboratory space, appropriate to a top world-level research center.
- vii. Hold international research conferences or symposiums regularly (at least once a year) to bring the world's leading researchers together at the center.
- viii. Other measures, if any, to ensure that top-caliber researchers from around the world can comfortably devote themselves to their research in a competitive international environment.
- (6) Indicators for evaluating a center's global standing
- · Describe concretely the following points.
- i) Criteria and methods to be used for evaluating the center's global standing in the subject field
- ii) Results of current assessment made using said criteria and methods
- iii) Goals to be achieved through the project (at time of interim and final evaluations)

(7) Securing research funding

- i) Past record
- Indicate the total amount of research funding (e.g., competitive funding) secured by principal investigators who will join the center project. Itemize by fiscal year (FY2007-2011) taking into account the percentage of time each will devote to research activities at the center vis-à-vis the total time they spend conducting research activities ("Effort 2" in Appendix 2). For example, if this percentage is 70%, then 70% of his/her research funds can be counted in calculating the total amount of research funds.
- ii) Prospects after establishment of the center
- Based on the past record, describe the concrete prospects for securing resources that match or exceed the project grant.
- Calculate the total amount of research funding (e.g., competitive funding) based on the percentage of time the researchers devote to research activities at the center vis-à-vis the total time they spend conducting research activities ("Effort 2") in Appendix 2). Be sure the prospects are realistically based on the past record.
- (8) Exploiting the results of previously-initiated center-building efforts (when applicable)
- For government-funded center-building project, enter program name, project title, project representative, funding period, etc. (Enter financial amount in Section 3. Appropriations Plan)

Program name:

Project title:

Representative's name:

Funding period:

Other:

- For a project with other funding source, concretely describe the content. (Enter financial amount in Section 3. Appropriations Plan) This includes in-kind contributions and other forms of assistance by the host institution (including partial payment of salaries, provision of research space)
- Meant by previously-initiated center-building effort are those that cover personnel costs of researchers whose main duties are in the center, personnel costs of center staffs, costs of center's activities, costs of maintaining the research environment (excluding capital expenditures for purchasing or leasing land and buildings).
- Describe why you believe that you can yield a top world-level center by applying new concepts to the heretofore results of your previously-initiated center-building efforts.

Describe concretely your prospects for securing the same scale of the measured amount through independent resources after that funding eventually ends in future.
Others
 Describe activities and initiatives to be taken after project funding ends.
 Describe expected ripple effects (e.g., how the proposed research center project will have trailblazing components that can be referred to by other departments in the host institution and/or other research institutions when attempting to build their own top world-level research centers). Describe other important measures to be taken in creating a world premier international research center, if any.

3. Appropriations Plan (in English)

o. Appropriations	`	<u> </u>				
Annual Plans (F	Y 2012 -	- FY 202 1	l)		(tho	usand dollars)
Fiscal Year	2012	2013	2014	2015	2016	
Requested funding						
Funding for previously-initiated center-building efforts						
Total						
Fiscal Year	2017	2018	2019	2020	2021	Total
Requested funding						
Funding for previously-initiated center-building efforts						
Total						

<FY2012>

- •Describe the concrete content of the center project.
- •In the case of existing center-building efforts, describe the concrete content.

Details of Costs			<u>, </u>	
Items		Costs (thousand dollars)	Notes	
<fy 2012=""></fy>				
(WPI grant)				
Only costs necessary for implementing the research center project.	t are applicable.			
 If satellites and/or partner institutions are established, give a sepa 	rate breakdown	in the		
use of funding.				
 For the first year (FY2012), assume that carrying out project activity 	ŭ			
preparations to officially launch the center will start right after the	•			
made, and subsequently the official launch of the center will be do				
December. The funding scale for the first year's implementation is	6 months.			
• Examples:				
Compensation of center director	XXX do			
Salary of administrative director	XXX d			
Funding for Prof. XXX	XXX do			
(Details) Compensation	XXX do			
Salaries of postdoctoral researchers	XXX d	ollars		
(no. of subject person)	V/V/ -1-	. 11		
Startup research funding	XXX do	ollars		
Salaries of postdoctoral researchers	XXX	Dilais		
(no. of subject person)	XXX do	llore		
Salaries of research support staffs (no. of subject person)	777 UU	mais		
Salaries of administrative staffs	XXX do	llars		
(no. of subject person)	7000 do	ii.a.io		
Rental fees for research space	XXX do	llars		
Costs of holding international symposiums	XXX do			
(no. of symposiums)				
Domestic travel costs	XXX do	llars		
Overseas travel costs	XXX do	llars		
Costs of purchasing equipment and consumables	XXX do	ollars		

(Host institution: Genter name:

<FY 2013>FY2013 Project Scheme

Details of Costs			
Items		Costs (thousand dollars)	Notes
<fy 2013=""> (WPI grant)</fy>			
(Previously-initiated center-building efforts)			
(Toviously illiation better building enous)	'		
FY 2013 Total			
<fy 2014=""> FY 2014 Project Scheme</fy>			
Describe the concrete content of the center process. In the case of existing center-building efforts.		content.	
Details of Costs			
Items		Costs (thousand dollars)	Notes
<fy 2014=""> (WPI grant)</fy>			
9.2,			i
(····g·s.··)			
(· · · · g · · · · ·)			
(g.s)			

FY 2014 Total		
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Note: Please describe the Project Schemes and costs details for FY 2015-21 using the format above.

(Host institution: Center name:

4. Host Institution's Commitment (in English)

Date

To MEXT

Host institution

Name and title of head of host institution

Signature

I confirm that the measures listed below will be taken faithfully if "(center name)" is adopted under the World Premier International Research Center Initiative (WPI).

<Provision in host institution's mid-to-long-term plan>

• Describe clearly the host institution's mid-to-long-term strategy plan and how the center is positioned within that strategy.

<Concrete Measures>

- · Describe the concrete measures that the host institution will take to satisfy the following requirements.
- (1) How it will support the center's need to secure resources that match or exceed the project grant through such means as competitive grants obtained by researchers participating in the project, in-kind contributions and other forms of assistance by the host institution (including partial payment of salaries, provision of research space), and/or external donations. In the case of project exploiting previously-initiated center-building efforts, how it will assist the center in securing sufficient independent resources to continue to secure the same scale of the measured amount through independent resources after that funding eventually ends.
- (2) How it will institute a system under which the center's director is able to make substantive personnel and budget allocation decisions necessary to implementing the center project—a system, which in practice, allows the center director autonomy in making decisions regarding the center's operation.
- (3) The support it will provide to the center director in coordinating with other departments within the host institution when recruiting researchers for the center, while giving reasonable regard to the educational and research activities of those departments.
- (4) Its flexibility in applying, revising, or supplementing the host institution's internal systems as needed for the center to effectively implement new management methods (e.g., English-language environment, merit-based pay, top-down decision making) unfettered by conventional modes of operation.

(Host institution:

Center name:

)

(5) Its accommodation of the center's infrastructural requirements (for facilities, e.g., laboratory space; equipment; land, etc.).
(6) How it will support to sustain the center as a world premier international research center after the
WPI-grant period ends.
(7) Other types of assistance it will provide to give maximum support to the center in achieving its concepts and objectives and becoming a world premier international research center in both name and deed.

(Compile two versions: in English and in Japanese)

List of Principal Investigators

- •If the number of principal investigators exceeds 10, add columns as appropriate.
- •Place an asterisk(*) by the name of the investigators who are considered to be ranked among the world's top researchers.
- •Give age as of 1 December 2012.
- •In case of researchers in previously-initiated center-building efforts, place an asterisk(*) in the "Notes" column.
- For investigators who cannot participate in the center project from its beginning, indicate the time that their participation will start in the "Notes" column.

Name	Age	Current affiliation (organization, department)	Academic degree and current specialties	Notes
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

(Host institution: Center name:)

Biographical Sketch of Principal Investigators/Prospective Center Director

	· Place an asterisk(*) by the name of the investigators who are considered to be ranked			
Name	among the world's top researchers.			
(Age as of 1 Dec. 2012)				
0				
Current affiliation				
(Organization, Department)				
Academic degree and current specialties				
Timing of	If he/she will participa	te in the center proi	iect from the beginn	ning, fill in "from start".
participation	ii norono viii participa	io in the contor proj	joot iroin tiio bogiiii	mig, im iii moin otait i
	Percentage of time he/she will devote to the research activities at the center			
Effort 1	(including grant-funded research) vis-à-vis his/her total working hours. (b%)			
	Percentage of time oth	ner than research de	evoted to the center	s activities (c%)
	· Total (b+c %)			
	· Fill in the percentage of			
	vis-à-vis the total time	he/she spends cond	ducting research ac	tivities. (b/a%).
Effort 2				b/a=
	<total ho<="" td="" working=""><td>ours: 100%></td><td></td><td></td></total>	ours: 100%>		
	Total time			Total time
	spent doing	T' 111	T '	devoted to
	research	Time devoted to research	Time devoted to other	activities other
	(a%)	activities	activities	than research
		related to the	related to the	such as education (d%)
		center (b%)	center (c%)	education (u 76)
Research and education	n history			
Achievements and highl	ights of past research	activities		
7 tornovomorno ana mgm	igino oi paot roccaron	donvinos		
· Describe his/her qualifica	ations as a top-caliber rese	earcher if he/she is	considered to be rar	nked among the world's
top researchers.	·			•

1

Achievements
(1) International influence
· Fill in experiences listed below.
a) Guest speaker, chair, director, or honorary member of a major international academic society in the subject field
b) Holder of a prestigious lectureship
c) Member of a scholarly academy in a major country
d) Recipient of an international award(s)
e) Editor of an influential journal
etc.
(2) Descript of large cools compatitive founding
(2) Receipt of large-scale competitive funding
· List receipts of large-scale competitive funds (over past 5 years).
(3) Article citations
(3) Article Citations
· Fill in titles of major publications, and number of citations.
(4) Others
· List other achievements that show his/her qualifications as a top-caliber researcher (if any).