

# **World Premier International Research Center (WPI) Initiative**

## **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" being able to attract top-level researchers from around the world.

**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)

**3. Number of awards:**

Approximately 5

**4. Implementation period**

10 years, with possible 5-year extension for projects with outstanding results.

An interim evaluation will be carried out five years after the project starts. Projects 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 requirements, providing a clear description of the steps and timetables to meet them.

**(1) Research field**

A field of basic research, including one aiming at the transition from basic research to applied research, in which a world-class research group currently exists in Japan. In principle, the field should be interdisciplinary, spanning or combining two or more of research areas. Examples of research areas are as follows:

Biosciences, Chemistry, Material Sciences, Electronics Engineering and Information Sciences, Precision and Mechanical Engineering, Physics, Mathematics.

**(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 new domains are expected to be pioneered by fusing the target fields. In the process, what world-level scientific issues are sought to be resolved. 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 or final approval on hiring principal investigators.

#### **(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 10-20 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 200 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 other duties 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 primarily for researchers from outside the host institution. As a basic rule, the salaries of researchers who were already employed at the host institution prior to the center's establishment are to be paid by the host institution. (See Attachment 1. )
- 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. This may take

such forms as competitive funding obtained by the center's researchers, in-kind contributions and other forms of assistance by the host institution (including partial payment of salaries, provision of research space), and external donations.

## **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 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.
- (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.
- (5) Its accommodation of the center's infrastructural requirements (for facilities, e.g., laboratory space; equipment; land, etc.).
- (6) 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 project proposal should not be limited to activities supported by the 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 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 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) Funding required to implement operational components contained in the Appropriations Plan will be provided in the form of a subsidy from MEXT. Funds equivalent to 30% of direct costs will be provided to the host institution to cover its indirect costs.
- (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 project grant will, in principle, cover costs totaling between 500 million yen and 2 billion yen annually. (This figure includes indirect costs. 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.)

## **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 -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?
- 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?
- Can efforts to sustain the center as a world premier international research center be expected after program funding ends?

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 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 establish an advisory committee comprising outside experts, including overseas specialists, to seek advice on the implementation of the project proposal including the attendant Appropriations Plan and host institution's commitment.

In the interim evaluation year and the year the project is scheduled to end, the advisory committee is to conduct a rigorous evaluation of the project's progress in creating a "globally visible research center," including the degree to which it has attracted top-caliber researchers from abroad and has achieved its research objectives, and shall report the results to MEXT. MEXT will decide whether to continue or to terminate grant support taking into account the findings of the report and the views of the Program Committee.

- (3) In addition, 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.
- (4) For each project selected, MEXT will establish under the Program Committee a working group of experts which will review the reports described in paragraph (3) 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.
- (5) 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.
- (6) Should a need arise to make a change in the center director or other important elements of the project (to be specified in a separate document), 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 materials to be submitted**

- (1) Before making an official application, a pre-application registration form (Attachment 2) should be submitted. It is going to be used in selecting referees for the document review, but will not be a subject of the evaluation itself. If this form is not received in time, the official application cannot be accepted.



- (2) Application materials are to be submitted using the application forms prescribed in Attachment 3. (Official application materials for review process should be in English, while Japanese-language versions are requested in some forms.)
- (3) 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 70
  - CD-R(W) disc with electrical files of application materials (excluding the official document): 1

Addresses

- a. Submission of pre-application registration form: Email to the email address below.
- b. Submission of application forms and materials: When mailing the documents, write “Re: WPI Application forms” on the envelope and send it with ample lead time by a mode of mail or delivery that shows the posting date.

WPI Initiative Section  
University-Industry Cooperation and Research Program Division  
Japan Society for the Promotion of Science  
6 Ichibancho, Chiyoda-ku, Tokyo 102-8471, JAPAN  
email: jspstoplevel@jpsps.go.jp

- (4) 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 shall be used as material for screening and selection by MEXT (and Japan Society for the Promotion of Science (JSPS)), but not for any other purpose. Confidentiality regarding their content shall be strictly observed. (For details, see <http://www.soumu.go.jp/gyoukan/kanri/kenkyuu.htm>)
- (5) Information contained in the application materials may be provided to administrators of competitive funds, including those of other agencies (e.g., independent administrative institutions), to the extent required for the purposes described in section 12 (3) below.

Information may likewise be provided for the purpose of checking for duplicate funding proposals submitted to other competitive funding programs.

## **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 Initiative for a given period of time, as indicated below.

In addition, information regarding such cases of grant misuse will be provided to the administrators of other competitive funds, including those of other ministries and agencies, which may cause the violator(s) to be restricted from applying for or participating in the competitive fund programs under their jurisdictions.

- (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.

Note: To guard against research grant misuse, each research institution is requested to establish its own management and audit systems, submit progress reports to MEXT, and extend cooperation when on-site inspections are made of their systems' implementation status, as called for in the "Guidelines for Management and Audit of Public Research Funds at Research Institutions (Implementation Standards)" (MEXT, Feb. 15, 2007).

c. 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 Initiative for a given period of time, as indicated below, in keeping with the "Guidelines for Responding to Research Misconduct" (Special Committee on Research Misconduct, Council for Science and Technology, August 8, 2006).

In addition, information regarding said research misconduct will be provided to administrators of other competitive funds, including those of other ministries and agencies, which may cause the violator(s) to be restricted from applying for or participating in the competitive fund programs under their jurisdictions.

- (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.

d. Measures regarding researchers who have been restricted from applying for or participating in other competitive funding programs

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

\*For a list of programs to which these provisions apply, see

<http://www8.cao.go.jp/cstp/compefund/06ichiran.pdf>

Included are programs that issue new calls for applications in FY 2007. In some cases, programs that ended in or before FY 2006 are also included.

e. 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 title of center projects 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.
- Pursuant to the “Guidelines for Proper Execution of Competitive Funds” (September 9, 2005), some information from the application materials may be provided to other competitive grant programs, including those administered by other ministries and agencies, to the extent required to prevent unreasonable duplicate funding. If such duplication is determined, approval of the project may be rescinded. Approval may also be rescinded in the event that false information is provided in applications for or in the acceptance of other competitive funding.

**13. Contact information and calendar**

(1) CONTACT

For solicitation and other application information:

Planing and Evaluation Dividision

Science and Technology Policy Bureau

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

MEXT Bldg. 5F, 2-5-1 Marunouchi, Chiyoda-ku, Tokyo 100-8959, JAPAN

Tel: 03-5253-4111 (ext. 3983) Fax: 03-6734-4052

Homepage: <http://www.mext.go.jp/>

(Application forms and documents can be downloaded from this homepage.)

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

WPI Initiative Section

University-Industry Cooperation and Research Program Division

Japan Society for the Promotion of Science

Sumitomo-Ichibancho FS Bldg., 8 Ichibancho, Chiyoda-ku, Tokyo 102-8472, JAPAN

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

Homepage: <http://www.jsps.go.jp/>

(From 2 April, application forms and documents can be downloaded from this homepage.)

## (2)SCHEDULE

Submission of pre-application registration form: 7-10 May 2007.

Submission of application materials: 28-29 May 2007.

Notification of selection results (tentative): the beginning of September 2007.



## **Attachment 1.**

### **1. Allowable direct costs**

#### **(1) Equipment costs**

Equipment and fixtures (items, including books [but not magazines], that do not change in nature or form by relatively long-term usage) purchased with grant funds should be logged as such, assigned an inventory number and labeled, and otherwise properly managed and maintained.

As the purpose of the grant is not procurement of goods, eligible expenditures are limited to items that are essential to implementation of the project.

The direct-cost component of the grant may also be applied to minor costs accompanying the installation of the abovementioned equipment.

#### **(2) Travel costs**

Eligible travel costs are limited to travel (domestic and overseas travel, travel and accommodations of invited scientists) required to implement the project.

#### **(3) Personnel costs**

The grant's direct-cost component may be used for salaries, honoraria, and benefits paid to persons carrying out research, research support, labor, or provision of expert knowledge required to implement the project. (Excluded is compensation to personnel concurrently employed in another department or section of the host institution. However, compensation to such persons as well as personnel costs to fill vacancies in departments or sections of the host institution may be covered as an indirect cost.)

#### **(4) Range of costs**

The grant's direct-cost component may be applied to the costs of consumables, rental and leasing fees, printing and binding, communication and transport, utilities, miscellaneous business expenses (e.g., remittances; revenue stamps; filing, registration, or maintenance of intellectual property rights; creation of prototypes.) meetings, subcontracting, per diems for invited foreign researchers, and other minor expenses as approved by MEXT.

Consumables include the purchase of consumable equipment and materials, chemicals, animal feed, and other consumable supplies, as well as purchase of equipment parts.

Subcontracting is limited to work needed to effectively and efficiently implement the project.

The grant’s direct-cost component may not be used to defray costs not directly related to the execution of the project, including alcoholic drinks, post-lecture parties, and social gatherings with no direct connection the project implementation; costs incurred due to accidents or disasters that occur during execution of the project; or funds to support students in their studies. However, it may be used to cover the cost of receptions held as components of international conferences or symposiums related to the project.

The grant’s direct-cost component may not be used to defray construction costs for buildings and other facilities (with the exception of small-scale repairs) or for the acquisition of real estate. (However, costs of renting a research building/wing constructed under the private finance initiative (PFI), or costs of building a research building/wing or renovating an existing structure may be covered as an indirect cost.)

**2. Examples of eligible direct costs**

The following are examples of allowable use of the grant’s direct 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 gatherings
- 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

**3. Allowable indirect costs**

The grant’s indirect-cost component may be utilized as appropriate, using the attached “Examples of Major Eligible Indirect Costs” as a guide. (Expenditures categorized as direct costs are not eligible for indirect-cost allocations.)

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## **Examples of Major Eligible Indirect Costs**

Of the costs incurred by the host institution that are indirectly required to implement project-related research, the following are eligible for grant funding.

- **Costs associated with administration**

- Costs of creating, maintaining, and operating administrative facilities and equipment
- Costs necessary to carry out administrative work

Costs of purchasing equipment and consumables, costs of leasing machinery, miscellaneous business expenses, personnel expenses, costs for communication and transport, gratuities and honoraria, domestic and overseas travel, meetings, printing, etc.

- **Cost associated with research**

- Costs of common-use items

Costs of purchasing equipment and consumables, costs of leasing machinery, miscellaneous business expenses, communication and transport costs, gratuities and honoraria, costs for domestic and overseas travel, meetings, printing, newspapers and magazines, utilities

- Costs related to advancing research activities deriving from the application of the project research

Personnel costs for researchers and research support staff, cost of purchasing equipment and consumables, cost of leasing machinery, miscellaneous business expenses, costs for communication and transport, gratuities and honoraria, domestic and overseas travel, meetings, printing, newspapers and magazines, utilities

- Patent-related costs
- Costs of provision, maintenance, and operation of research building/wing
- Costs of provision, maintenance, and operation of facilities for care of laboratory animals
- Costs of provision, maintenance, and operation of facilities for exchange among researchers
- Costs of provision, maintenance, and operation of equipment
- Costs of provision, maintenance, and operation of computer networks
- Costs of provision, maintenance, and operation of large-scale computers (including supercomputers)

- Costs of provision, maintenance, and operation of large-scale computer wing/building
  - Costs of provision, maintenance, and operation of libraries
  - Costs of provision, maintenance, and operation of cultivated land
- Etc.

- **Costs associated with other relevant aspects**

- Cost of activities to develop results of research
  - Cost of public relations activities
- Etc.

Costs not included in this list may nevertheless be eligible if the head of the host institution determines that they are indirectly required to implement the research project. Expenditures categorized as direct costs are not eligible for indirect-cost allocations.

Source: Common Guidelines for Indirect Costs under Competitive Funds (Agreement of the Inter-Ministry Committee on Competitive Funds, March 23, 2005).

**Attachment 2.**

**World Premier International Research Center (WPI) Initiative**

**Pre-application Registration Form**

(Prepare two versions: in English and in Japanese)

Host institution name			
Chief entire project officer (Head of host institution) name			
Chief center project officer	Name		
	Affiliation		
	Position title		
Prospective center director	Name		
	Affiliation		
	Position title		
Title of center project (Tentative title is OK. Within 15 words)			
Research field	The name of the research field		
	Key words (Choose 5 words that have a close connection to the field, using as reference the FY2007 keyword list of the Grants-in-Aid for Scientific Research)		
Project Summary (Within 100 words)			
English-language papers that have close relation to project concept (Review is OK. List up to 5 papers and attach PDF-formatted files of them.)			
Researchers deemed well-qualified to evaluate the center project from a scientific perspective (List up to 5, giving their names and affiliations. They may be either Japanese or non-Japanese. Exclude researchers who may have a conflict of interests.)			

This "Pre-application Registration Form" is used to select document reviewers; it is not a subject of the evaluation itself.

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.



*Attachment 3.*

World Premier International Research Center (WPI) Initiative

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.)

Host institution name																									
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.																								
Title of center project	· Within 15 words																								
Project Summary	· Briefly outline the general plan of the project (within 150 words)																								
Research fields	· Fill in the name of the research field. · Choose relevant fields from among ①-⑦ in (1) of 2. Research Center Project Proposal, specifying the interdisciplinary field(s) that the project addresses. · Describe the importance of the proposed research, 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	· 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 center director	· Name, current affiliation, and position title · How does the prospective center director intend to construct 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 limitaiton).																								
Prospective administrative director	· Name, current 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)																								
Appropriations plan (Exchange Rate: JPY/USD=120)	<table border="1"> <thead> <tr> <th>FY</th> <th>2007</th> <th>2008</th> <th>2009</th> <th>2010</th> <th>2011</th> <th>2012</th> <th>2013</th> <th>2014</th> <th>2015</th> <th>2016</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Cost (\$ millions )</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	FY	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Total	Cost (\$ millions )											
FY	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Total														
Cost (\$ millions )																									
Summary of host institution's commitment	· Briefly summarize the host institution's commitment																								

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

## 2 . Research Center Project (in English)

Host institution name	
Chief entire-project officer (Head of host institution)	· Name, position title
Chief center-project officer	· Name, affiliation, position title
Title of center project	
Project summary	<ul style="list-style-type: none"> <li>· Briefly describe the general plan of the project.</li> <li>· Include a chart that illustrates the center's overall structure including its collaborative linkages with other domestic and foreign institutions, its system of external evaluation, and its management framework</li> </ul>
<p>(1) Research fields</p> <ul style="list-style-type: none"> <li>· Fill in the name of the research field of the project.</li> <li>· Choose relevant fields from among - below, specifying the inter disciplinary field(s) that the project addresses. Biosciences, Chemistry, Material sciences, Electronics engineering and information sciences, Precision and mechanical engineering, Physics, Mathematics</li> <li>· Describe the importance of the proposed research, including domestic and international R&amp;D trends in the field and Japan's advantages.</li> <li>· If centers in similar fields already exist in Japan or overseas, please list them.</li> </ul>	
<p>(2) Research objectives</p> <ul style="list-style-type: none"> <li>· 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 new domains are expected to be pioneered by fusing the target fields. In the process, what world-level scientific issues are sought to be resolved. What is the expected impact of the scientific advances to be achieved on society in the future.</li> </ul> <p>This is just an example idea; Make the technology of artificial photosynthesis in practical use. Develop the new domain of bio material engineering through the integration of bioscience, material science, chemistry, and other sciences, so that we will be able to use artificial photosynthesis for creating high-efficiency energy and converting material. If these technologies are in practical use, a significant effect will be brought on energy and global warming issues by creating sun-light based clean energy and effectively immobilizing carbon dioxide.</p> <ul style="list-style-type: none"> <li>· Describe concretely the research plan to achieve the objectives, and any related past achievements by the host institution.</li> </ul>	
<p>(3) Management</p> <p>i) Prospective center director</p> <ul style="list-style-type: none"> <li>· Fill in the name of the prospective center director, his/her age (as of 1 October 2007), current affiliation and position title, and specialties. Describe his/her qualifications to be the center director.</li> <li>· Attach a biographical sketch of the prospective center director using Appendix 2.</li> <li>· How does the prospective center director intend to construct the center and what is his/her vision of objectives to be achieved? Provide a synopsis written by the prospective center director (free format).</li> <li>· If possible, attach a letter (s) of recommendation for the prospective center director from researchers with world-standard achievements in the subject field.</li> </ul> <p>ii) Prospective administrative director</p> <ul style="list-style-type: none"> <li>· Fill in the name of the prospective administrative director, his/her age (as of 1 October 2007), current affiliation and</li> </ul>	

position title. Describe his/her qualifications to be the administrative director.

- Attach a CV of the prospective administrative director (free format).

iii) Composition of administrative staff

- 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 the host institution's side

- Concretely describe how authority is allocated between the center director and the host institution's side.

(4) Researchers and other center staffs

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

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

	numbers		Final goal (Date: month, year)
	At beginning	At end of FY 2007	
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.
- Attach a list of principal investigators who are expected to join the center at the time of the application using Appendix 1. 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 PIs who are to be invited in the future.
- Attach a biographical sketch of each 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 beginning	At end of FY 2007	Final goal (Date: month, year)
Researchers (Number of foreign researchers among them and their percentage)			
Principal investigators (Number of foreign researchers among them and their percentage)			
Other researchers (Number of foreign researchers among them and their percentage )			
Research support staffs			
Administrative staffs			
Total number of people who form the "core" of the research center			

- 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, fill in the name of the partner institution(s), and describe the role of the satellite functions, personnel composition and structure, and collaborative framework between the host institution and the said partner institutions (e.g., contracts to be concluded, scheme for resource transfer).
- If some of the principal investigators will be stationed at satellites, attach a list of these principal investigators and the name of their satellite organizations using 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, fill in the names 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 outlined below, including steps and timetables.

Provide an environment in which researchers can devote themselves exclusively to their research, by exempting them from other duties and providing them with adequate staff support to handle paperwork and other administrative functions.

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.

As a rule, fill postdoctoral positions through open international solicitations.

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.

Adopt a rigorous system for evaluating research and a system of merit-based compensation. (For example, institute a merit-based annual salary system primarily for researchers from outside the host institution. As a basic rule, the salaries of researchers who were already employed at the host institution prior to the centers’ establishment are to be paid by the host institution.)

Provide equipment and facilities, including laboratory space, appropriate to a top world-level research center.

Hold international research conferences or symposiums regularly (at least once a year) to bring the world’s leading researchers together at the center.

Other measures to ensure that top-caliber researchers from around the world can comfortably devote themselves to their research in a competitive international environment, if any.

(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 (FY2002-2006) 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 ” 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 ” in Appendix 2). Be sure the prospects are realistically based on the past record.

#### 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.
- If one or more of the projects applying for Global COE program have some connections with this research center project, list the project title(s) , outline(s), group leader(s) and the relationship(s) with this project.

### 3 . Appropriations Plan (in English)

Annual Plans (FY 2007 – FY 2016)						
Fiscal Year	2007	2008	2009	2010	2011	
Requested funding (dollars)						
Fiscal Year	2012	2013	2014	2015	2016	Total
Requested funding (dollars)						

#### < FY2007 >

FY2007 Project Scheme		
Describe the concrete content of the center project to be funded in FY2007.		
Details of Costs		
Items	Costs (dollars)	Notes
< FY 2007 >		
Direct Costs		
<ul style="list-style-type: none"> <li>• Only costs necessary for implementing the research center project are applicable.</li> <li>• Cost incurred by the host institution and by satellite organizations should be described separately.</li> <li>• The amount of FY 2007 funding should be calculated on the premise that the period of the center's operation is half a year.</li> <li>• FY 2007 project implementation is scheduled to start in October.</li> <li>• Examples: <ul style="list-style-type: none"> <li>Compensation of center director XXX dollars</li> <li>Salary of administrative director XXX dollars</li> <li>Funding for Prof. XXX XXX dollars</li> <li>(Details) Compensation XXX dollars</li> <li>Salaries of postdoctoral researchers XXX dollars</li> <li>(no. of subject person)</li> <li>Startup research funding XXX dollars</li> <li>Salaries of postdoctoral researchers XXX dollars</li> <li>(no. of subject person)</li> <li>Salaries of research support staffs XXX dollars</li> <li>(no. of subject person)</li> <li>Salaries of administrative staffs XXX dollars</li> <li>(no. of subject person)</li> <li>Rental fees for research space XXX dollars</li> <li>Costs of holding international symposiums XXX dollars</li> <li>(no. of symposiums)</li> <li>Domestic travel costs XXX dollars</li> <li>Overseas travel costs XXX dollars</li> <li>Costs of purchasing equipment and consumables XXX dollars</li> </ul> </li> </ul>		
Indirect Costs		30% of Direct Costs
FY 2007	Total	

**< FY 2008 >**

FY2008 Project Scheme		
Describe the concrete content of the center project to be funded in FY2008.		
Details of Costs		
<b>Items</b>	<b>Costs (dollars)</b>	<b>Notes</b>
< FY 2008 > Direct Costs		
Indirect Costs		30% of Direct Costs
FY 2008	Total	

**< FY 2009 >**

FY 2009 Project Scheme		
Describe the concrete content of the center project to be funded in FY2009.		
Details of Costs		
<b>Items</b>	<b>Costs (dollars)</b>	<b>Notes</b>
< FY 2009 > Direct Costs		
Indirect Costs		30% of Direct Costs
FY 2009	Total	

Note: Please describe Project Schemes and details of costs for FY 2010-16 using the format above.

## **4 . Host Institution's Commitment** (in English)

Date

To MEXT

Name of host institution  
Name and title of head of host institution

Signature

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

< 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.

(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.

(5) Its accommodation of the center's infrastructural requirements (for facilities, e.g., laboratory space; equipment; land, etc.).

(6) 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.

## List of Principal Investigators

Name	Age	Current affiliation (organization, department) and specialties	Academic degree	Notes

- 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 October 2007.
- For investigators who cannot participate in the center project from its beginning, indicate the time that their participation will start in the "Notes" column.

## Biographical Sketch of Principal Investigators/Prospective Center Director

Name (Age as of 1 Oct. 2007)	· Place an asterisk(*) by the name of the investigators who are considered to be ranked among the world's top researchers.			
Current affiliation (Organization, Department) and Specialties				
Academic degree				
Timing of participation	· If he/she will participate in the center project from the beginning, fill in "from start".			
Effort	· Fill in the percentage of the amount of time he/she will devote to the research activities at the center (including other grant-funded research) vis-à-vis his/her total working hours (including time devoted to education). (b%)			
Effort	· Fill in the percentage of time he/she will devote to research activities at the center vis-à-vis the total time he/she spends conducting research activities. (b/a%).  <Total working hours: 100%> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tr> <td style="width: 33%; padding: 5px; vertical-align: top;">                             Total time conducting research activities (a%)                         </td> <td style="width: 33%; padding: 5px; vertical-align: top;">                             Time devoted to research activities at the center (b%)                         </td> <td style="width: 33%; padding: 5px; vertical-align: top;">                             Time devoted to other activities such as education                         </td> </tr> </table>	Total time conducting research activities (a%)	Time devoted to research activities at the center (b%)	Time devoted to other activities such as education
Total time conducting research activities (a%)	Time devoted to research activities at the center (b%)	Time devoted to other activities such as education		
Research and education history				
Achievements and highlights of past research activities  · Describe his/her qualifications as a top-caliber researcher if he/she is considered to be ranked among the world's top researchers.				

## 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) Receipt of large-scale competitive funding

• List receipts of large-scale competitive funds (over past 5 years).

### (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).