5. Host Institution's Commitment (in English)

Date January 30, 2012

To MEXT

Name of host institution: Osaka University
Name and title of head of host institution: Toshio Hirano, President

Signature

I confirm that the measures listed below will be taken faithfully regarding "Osaka University Immunology Frontier Research Center" adopted under the World Premier International Research Center 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.

In the Osaka University Medium-Term Plan for the 1st period (1st MTP, FY2004 - FY2009), it was stated that the research objective of the University is "to support development in science and industrial technology and flexibly handle research subjects of great urgency, such as applied and advanced research for human society and culture of the 21st century", which was in line with what the host institution of a WPI center should commit.

During the latter half of the 1st MTP, IFReC was actually selected as one of five WPI research centers and started its operation. In the Medium-Term Plan for the 2nd period (FY2010 - FY2015), the research objective has been further developed "to promote the world's top class research, advance knowledge in various research fields by fully utilizing the capacities of different research organizations of the university, and promote interdisciplinary research by establishing an innovation hub that supports both basic and applied research". This statement is a clear indication of the University's strong awareness of the reasons under which IFReC was selected, and its objective as a WPI center.

<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.

During the initial period between FY2007 and FY2010, Osaka University supported IFReC in establishing its foundation to become a WPI center by providing available resources that would be either greater or equal to the WPI project grant including:

- 1) Allocation of all indirect costs of the WPI budget to be at the disposal of IFReC for the initial setting-up
- 2) Construction of the Integrated Life Science (ILS) building (10-sroried, 9,258 m² of space) to provide laboratory space of real international standard for the core PIs of IFREC (2009)
- Finance support of construction of the IFReC Animal Resource Center for SPF animals (4-storied, 2,482 m² of space with 5,000cages for 25,000 mice)
- 4) Provision of a tenured position to invite professor Sakaguchi from Kyoto University, who is an indispensable PI for IFReC to become a world-leading institution of immunology
- 5) Eligibility of IFReC researchers to apply intra-university competitive research funds
- 6) Assignment of two administrative staff employed by the university budget

Along with these existing measures, Osaka University will continue to make every effort to support IFReC securing resources that match or exceed the WPI budget.

(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.

The University has entitled the Center Director to manage and operate the center by making decisions regarding substantive personnel and budget allocation. However, important matters such as annual budget and appointment of PIs are to be approved at the Center Management Committee and the Board of Representatives. The Administrative Director is authorized to give full support to the Director by acting as a coordinator among the Center Director and Deputy Directors and executing management actions through the reformed administrative office. Thus, the director can literally make top-down decisions and reformation of research environments so that IFReC PIs can devote themselves to research.

(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.

When a researcher from a different department in Osaka University joins the WPI as a full time researcher, Osaka University will support the replacement by indirect research expenses and/or other expenses. If a researcher at other departments in Osaka University is working concurrently at the center, he or she will be exempted from educational work. Osaka University will support resource sharing/exchange between the WPI and other 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.

To maintain the excellent research environment as a WPI center, IFReC will apply the existing employment system of Osaka University, including the annual salary system. If the present employee system of Osaka University does not fit in with the operation of the Center, then Osaka University will consider revising and supplementing the present internal system of Osaka University. The new system should be flexibly operated. Osaka University will support the WPI's enforcement to endorse the system and its operation as follows:

- 1) IFReC will ensure that the retirement allowance to be paid to the hired researcher is based on the total years of service to the Center and other institutions.
- 2) The housing of international visiting professors will be arranged by IFReC so there is no need to pay neither the security deposit nor key money.
- 3) To hire exceptional researchers, salaries can be changed from the existing system depending on their ability.
- 4) Linguistically able English speaking administrative staff will be hired from both inside and outside the University, with on-the-job training after employment.

The aforementioned items will undergo examination as necessary by related departments of Osaka University.

As for housing of international visiting professors and researchers, accommodation of international standards (Kasugaoka House) was constructed in 2010. Here, several IFReC researchers and their families currently reside (part of the rent is subsidized from the WPI budget).

In addition, Osaka University established the Support Office for Large-Scale Education and Research Projects (LSERP) and the Office for International Planning and Programs (IPP) in 2009 and 2010, respectively. LSERP is to improve support systems for obtaining large-scale education and research projects for Osaka University, in order to fortify the planning and strategic functions for such projects. Several personnel with research experience together with PhD and bilingual staff have been recruited to the administrative office of LSERP.

One of the goals of IPP is to promote research collaborations with scholars and institutions overseas and to share the research results for the benefit of the global society, which is almost exactly what is mentioned in the WPI program, and hence beneficial to IFReC.

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

As described above (1), the University constructed the ILS building in 2009 to provide 11 IFReC PIs sufficient spaces to set up their laboratories. Next to this building, construction of a new IFReC research building (nine-storey, 6592m²) was completed in March 2011, where 9 IFReC laboratories moved into. This makes it possible for all of the full-time researchers of IFReC to assemble together.

The University-supported the construction of the IFReC animal resource center (1), which together with two animal resource centers of the Research Institute for Microbial Diseases, has made it possible for IFReC to use these centers for different experimental purposes.

The University has also made necessary arrangements for IFReC researchers to use equipment in other faculties.

(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.

The Support Office for International Students and Scholars, Osaka University (the Support Office), which was first established in 2007 within the International Student Affair Division, at Department of International Affairs, and then reformed as the present office in 2009, offers various types of assistance for international students and scholars and their families before and after their arrival in Japan. The primary goal of the Support Office is to help make the life of international students and scholars easier and more comfortable in Japan, the very existence and activity of the Support Office are quite beneficial to IFReC, since overseas researchers, now exceeding 30% of the total researchers, can concentrate fully on their academic activities throughout the duration of their stay in Japan.

The University also established the Gender Equality Promotion Office in 2010 to provide career support and encouragement for young scholars who will be next-generation researchers. This office will support IFReC to increase the number of female researchers, female PIs in particular.

Furthermore, the University concluded research collaboration agreements with NICT, (2009) and RIKEN (2010). Based on these agreements, QBiC of RIKEN started its operation in the University campus in 2011 and the research building of CiNeT is under construction in walking distance from IFReC. Both centers are headed by Yanagida, a Deputy Director of IFReC. The main focus at CiNeT is technological innovation for direct imaging of cellular activities, metabolism and systems analysis of cellular networks in the brain, while quantitative and comprehensive studies are performed to accurately predict and control complex biological phenomena at QBiC. Collaborations with these centers will be made in due course, helping IFReC to advance interdisciplinary researches necessary for open a new era of immunology.