

Further development of the WPI Program



A handwritten signature in black ink that reads "Ryoji Noyori".

Ryoji Noyori

Chairperson of
the Program Committee of
the World Premier International
Research Center Initiative

As is clear from the three Nobel Prizes in science won by Japanese researchers in recent years, individuals within Japan's science community are continuing to produce highly regarded research results, but this will not be adequate if Japan wishes to remain a powerful world leader.

Over the last decade, the WPI Program's aim has been to create optimal research centers of a global standard. This is because it is organizations with a strong presence that attract the world's best intellectuals, and the honing of skills that arise from competition between these people opens up new horizons in science. This in turn inspires subsequent generations, and encourages their growth and development. Happily, the program has proved successful in this regard, thanks to the commendable leadership of the directors of each of the WPI centers, the comprehensive support provided by the heads of host institutions, the able evaluation work of the Program Committee, which is composed of domestic and overseas experts, and above all, the unwavering resolve of the Ministry of Education, Culture, Sports, Science and Technology to work toward system reform.

Five WPI centers were accepted into the program in FY 2007: AIMR, IPMU, iCeMS, IFRcC, and MANA. All five of the centers were able to meet the standards imposed by the WPI Program: World-leading research, creation of fusion areas, creation of an international research environment, and system reform of research organizations. In doing so they have built up WPI as a global brand. I²CNER, the center accepted in FY 2010, is pursuing green innovation. Meanwhile, the three centers accepted in FY 2012—IIIS, ELSI, and ITbM—which were slightly smaller in scale, can also be said to have been successfully operated with clearly defined focuses, and they are expected to make further progress still. Based on their historical backgrounds, Japan's universities face conditions that make the pursuit of fusion research difficult. Research environments that are more liberating than those found in existing organizations were created at WPI centers, and, I am glad to say, they more closely resemble ideal research environments. That the centers have contributed to the creation of personal networks, with top-caliber personnel congregating in them, before spreading out across the world, is another fruit of the WPI Program. What is most important is that the knowledge and experience accumulated through the program is shared with all of Japan's universities and research institutions, thereby contributing



to an enhancement of the overall standard in the country.

Nevertheless, we certainly must not rest on our laurels. Universities need to move with the times and society can change rapidly. Although the primary focus of the program is to advance basic scientific research, as hubs for the world's best minds, they will need to be sure to pioneer intellectual activities that are in step with the times.

The world is highly diverse. Contemporary society is driven by the domestic and international movement of people, and the activities of groups built around a particular purpose. Our aims are to enrich people's lives, create a safer country, and sustain civilized society. Creating new social values requires the integration of wide-ranging areas of knowledge and wisdom, and ensuring the diversity of personnel is therefore crucial. Ensuring the stable continuity of Japanese society requires the fostering of both international competitiveness and international cooperation, and we must participate proactively in "international brain circulation." How should we respond to the 2030 Agenda for Sustainable Development adopted by the U.N. General Assembly? Solving and alleviating the serious issues that threaten humanity, such as global warming, environmental degradation, increased risk from natural disasters, reduced "ecosystem services," depletion of energy resources, and infectious diseases, as well as Japan's massive public debt, declining childbirth rate, and ageing population, will require multifaceted wisdom, consensus building, and collaborative international efforts aimed at drafting and implementing concrete policies. In what ways can Japan's scientific community contribute to the solution of issues as diverse as these?

We are heading toward the second stage of the WPI Program. WPI centers need to look squarely at the overwhelming changes occurring in the world while operating as optimal research centers that Japan can be proud of. I would like all stakeholders to help identify issues, provide advice, and closely follow the future developments of the WPI Program.