

Kyoto International Conference Center

ICC Kyoto

50th ICC Kyoto

Beyond 50th Anniversary

NEWS
LETTER
2016



Generating innovation here in Kyoto, Showing the path to success in iPS cell research and development

iPS cells have captured the world's attention as a revolutionary path toward the treatment of intractable diseases. These are pluripotent stem cells which have the ability to change into various cells in the body. The Center for iPS Cell Research and Application at Kyoto University has played a focal role in research and development for these cells, and the 2012 Nobel Prize in Physiology or Medicine was awarded to its director, Professor Shinya Yamanaka. Since then, the professor has continued to push steadfastly forward the research and development of iPS cells, while also finding a number of ways to build stronger connections with the Kyoto International Conference Center (ICC Kyoto). One such effort was the lecture he delivered at The 29th General Assembly of the Japanese Association of Medical Sciences 2015 Kansai, which was held at ICC Kyoto. Professor Yamanaka took the opportunity to talk with us about his research, as well as his hopes for ICC Kyoto, which recently commemorated its 50th anniversary.



Profile

Shinya Yamanaka MD, PhD

Professor, Director of the Center for iPS Cell Research and Application (CiRA) at Kyoto University

Born in Osaka Prefecture in 1962. Graduated from Kobe University School of Medicine, then studied in the United States as a postdoctoral fellow. Returned to Japan in 1996, and some years later began research on iPS cells. Announced the successful generation of iPS cells in 2006, and in 2012 was co-recipient of the Nobel Prize in Physiology or Medicine along with Dr. John Gurdon.

Aiming for contributions to "Medicine"

President Hiroo Kinoshita, ICC Kyoto:

When you were awarded the Nobel Prize in Physiology or Medicine for your findings in iPS cell research, you said "This is the beginning." These words left a very strong impression.

Dr. Shinya Yamanaka: I was awarded The Nobel Prize in Physiology or Medicine. This means that the prize is awarded either in the field of physiology or the field of medicine. As such, when receiving the award I personally considered that I was receiving it for physiology. When I was engaged in clinical practice as a medical doctor, I deeply regretted my inability to cure patients' suffering from intractable diseases. I worked hard on the development of iPS cell research because I also wanted to come up with treatments that I couldn't deliver at the time. Thus, while I am happy to have received this award itself, my work still

has not reached the field of medicine. Without stopping at "physiology" I want to make certain to contribute to "medicine" by establishing new therapeutics, including the development of new drugs. I believe that was what I had in mind when I said "This is the beginning."

Interaction between disciplines for the "massive surge"

Mr. Kinoshita: Ten years have passed since you first successfully produced iPS cells in mice. During that time you have continued advancing your iPS cell research, but you say that in recent years you have begun to feel a "massive surge" in technological development in the fields of science and medicine.

Dr. Yamanaka: Japan is very much at the forefront of basic research in the fields of life sciences and medicine. The country has produced a long list of achievements. Unfortunately, when it comes to

turning the fruits of such basic research into medical applications that benefits society, Japan has achieved far less than other countries have. One example is the development of new drugs. Organizations referred to as "bridges" facilitate the transition of drug development from its initial stages to application and finally to the point where it is handed off to large corporations. In Japan, these organizations are insubstantial. In the United States, venture companies take on the role of bridges, and with generous endowments from funds they are able to assemble top level talent to carry out research and development. It is not easy to develop these types of companies in this country because Japan hardly has the culture to create venture mindsets that the US has. Japan has a culture that puts the highest priority on not failing, which causes hesitation in committing large amounts of investment and labor to research that is not certain to succeed.

In this sense, the Center for iPS Cell Research and Application at Kyoto University aims to take on the role that venture companies play in the US. Whatever can be done in the university setting, we try to do it there. The surge we are trying to create is different from those that have come before.

Mr. Kinoshita: In order to build such an ambitious research system, it seems you would need an unprecedented level of "collective team strength," not only with researchers under your lead, but also staff to support them. Is that a fair assessment?

Dr. Yamanaka: That's right. The initial stages of research can be done in a small laboratory with only a few researchers. However, the subsequent stages require more than just researchers. You need to have cooperation from people in a number of different fields, such as bioethics, patents, contracts, regulations, and public communications. Even for research itself, if you want to generate new achievements you can no longer rely solely on people from medical backgrounds. Now you also need to build systems for collaboration with researchers in other fields, such as mathematics, physics, and engineering. If we stick to the research and development systems that have been in place up to now, we will have no chance to compete with the rest of the world.

Mr. Kinoshita: The General Assembly of the Japanese Association of Medical Sciences was held throughout the Kansai region in April 2015, with ICC Kyoto at its center. You provided a lecture at the assembly, which was also a revolutionary assembly in terms of openness to the public. For the first time, companies and people from the general public were able to attend some of the lectures. With the title "The 29th General Assembly of the Japanese Association of Medical Sciences 2015 Kansai," it was also the first time that a large area such as Kansai was connected to the assembly. This event really

seemed to feature strong horizontal collaboration between various communities and fields of study.

Dr. Yamanaka: The approach of the medical world has also really changed from the times when the doctors were on top of the hierarchy, giving orders to the nurses and medical staff, and when patients just obeyed everything. In order to produce better results, the environment is now becoming one where doctors, medical staff, and patients all stand on equal ground and voice their opinions. Even if you are not sure what the results will look like, and even if it causes some momentary chaos, it is still important to give this a try; not only for the sake of medical treatments, but for generating new innovations as well. When you think about it this way, it really feels like we are witnessing the age of a "massive surge" where we boldly transform the conventional wisdom and traditions of the past.

Continuing research in the opportune environment of Kyoto

Mr. Kinoshita: Please tell us about the future goals for the Center for iPS Cell Research and Application at Kyoto University.

Dr. Yamanaka: Since developing new technologies takes a lot of time, the first goal is to make our institute a sustainable organization that can hold steady over the next 10, 20, even 30 years. In that respect, it is important to ensure that we are financially sound, so we are focusing on raising contributions for our iPS Cell Research Fund and reaching out to a wide range of citizens for support. Also, although this may sound repetitive, in this day and age you cannot generate anything without



"The 29th General Assembly of the Japanese Association of Medical Sciences 2015 Kansai"

networking with other fields and other cultures. In that respect, we are very lucky to have ICC Kyoto bringing together top people from various sectors around the world right here in our own backyard. We can learn from our diverse world, and can inform them of our research. This is how we would like to build on our research.

Mr. Kinoshita: This year ICC Kyoto commemorates its 50th anniversary. With this occasion in mind, we are building a new multi-purpose hall that aims to accommodate a capacity of around 5,000 people. And as you had mentioned about interactions between all kinds of diverse high-level people from throughout the world, we are hoping it can play just such a role as a meeting space that facilitates this type of networking. We hope you continue supporting ICC Kyoto for great things in the future, and invite you to make thorough and frequent use of our facilities. Thank you very much for your time today.



(Left) Interviewer Hiroo Kinoshita: After serving as Vice Minister for the National Land Agency and President of Hanshin Expressway Co., Ltd., he became President of ICC Kyoto in 2012.

Kyoto International Conference Center (ICC Kyoto)

The Journey of a Half-Century

Beyond 50th Anniversary

From Kyoto to the world.
From the world to Kyoto.
50 proud years of history.



The Third Conference of the Parties to the United Nations Framework Convention on Climate Change (COP3) (1997)



Science and Technology in Society forum (STS forum) (2004)



The Fifth Meeting of the U.S.-Japan Joint Committee on Trade and Economic Affairs (1966)



Completion of the Event Hall (1985)



Opening of the Kyoto City Subway Karasuma Line, and opening of Kokusaikaikan (International Conference Center) Station (1997)



Completion of the Annex Hall (1998)



Steel-frame construction (1964)



Completion of the Hoshio-an Tea House (1967)

Meetings held at ICC Kyoto

The 29th General Assembly of the Japanese Association of Medical Sciences 2015 Kansai

April 11 to 13, 2015

The 29th General Assembly of the Japanese Association of Medical Sciences 2015 Kansai took place from February through April in the Kansai Region, under the central theme of "Building connections for innovation in medicine and healthcare to help us live healthier lives together." The assembly was held through collaboration between twelve medical universities, one institution, and six medical associations hailing from six Kansai prefectures.

While comprehensive discussions took place concerning major issues in medicine and medical-related

fields, some of the lectures were additionally made open to individuals representing companies, as well as members of the general public. As a result some 30,000 people in total were able to participate, making the 29th general assembly a historical event for the medical congress.



Negotiations for Regional Comprehensive Economic Partnership (RCEP) in East Asia

June 8 to 13, 2015

As free trade agreements through regional economic partnerships have grown in importance, 2011 saw the launch of RCEP negotiations as proposed by ASEAN. The meetings for this eighth round of negotiations between senior level officials were to be held in Japan, and we were successful in attracting them to take place in our facilities. These negotiation meetings featured lively discussions between some 700 participants, which included government officials from 16 different countries. The proceedings were so eventful throughout that after seven days of negotiations, the final day was extended without certainty of when they would end.

We additionally provided a different meal for lunch on

each day of the meetings, featuring specialties from the cuisine of each of the participating countries. Efforts such as these were well-received by the participants, and ICC Kyoto received high praise for its hosting of the event.

* *Regional Comprehensive Economic Partnership (RCEP): Regional economic partnership of 10 ASEAN countries (Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam) and six other countries (Japan, China, South Korea, Australia, New Zealand, and India)*



The 5th World Engineering Conference and Convention

November 29 to December 2, 2015

The World Federation of Engineering Organizations (WFEO) holds its World Engineering Conference and Convention once every four years. This was the first to be held in Japan, and 3,000 engineers from around the world came together under the beautiful autumn foliage of Kyoto.

After the opening ceremony attended by His Imperial Highness the Crown Prince, several discussion sessions were subsequently held from the viewpoint of "Engineering for Society and Engineering in Society." Discussions covered the evolution of technology and

contributions to society across every different field of engineering.

The agenda of the conference concluded with compiling the Kyoto Declaration, a message from Kyoto to the world with statements including "Engineering must apply its proficiency to reduce carbon dioxide (CO2) emissions that accelerate climate change."



The 13th International Congress of Human Genetics (ICHG 2016)

April 3 to 7, 2016

The 13th International Congress of Human Genetics was held from Sunday April 3rd until Thursday April 7th. This conference is held once every five years by the International Federation of Human Genetics Societies (IFHGS), and it was the first to take place in Asia in the 60 year history of IFHGS.

Lively debates took place on the subject of genetic medicine, with lectures, announcements, and exhibitions, all under the central theme of "Genomic Medicine for

Tomorrow's Medical Practice."

There were around 3,000 participants over the course of the conference, which contributed significantly to learning and development on the subjects of human genetics and genetic medicine in Asia.



ICC Kyoto 50th Anniversary Commemoration Event

"Cherry Blossom Special Days 2016" Special opening and illumination of the garden for nighttime cherry blossom viewing

March 29 and 30, 2016

In commemoration of the 50th anniversary of ICC Kyoto, we had our first nighttime garden illumination. The Kyoto Museum of Traditional Crafts cooperated by providing interior decorations, giving visitors a truly authentic experience of traditional Japan.

Students from Kyoto City University of Arts also added more splendor to the event by performing famous classical music and a medley from Studio Ghibli movie

Kiki's Delivery Service. Both days of the event were blessed with excellent weather, and the many people that came (roughly 6,000) were rewarded with the sight of the cherry blossoms that had just come into bloom.



ICC Kyoto 50th Anniversary Commemoration, and 20th Anniversary Commemoration of the Sister Cities Agreement between Kyoto and Prague

"Summer Garden Party 2016"

- Dobry den (hello) from the Czech Republic! To a historical city -

July 30 and 31, 2016

Originally a commemoration for the opening of Kokusaikaikan (International Conference Center) Subway Station, our summer garden party was held for the 20th time. Every year a different theme country is selected for this event, and it is put on for the general public. This year there were around 3,000 attendees over the two days of the event. The theme country this time was the Czech Republic, and we introduced a plentiful array of Czech products and cultural material. Czech specialty beers and cuisine were sold, and an instructor provided beer lessons as well as presentations on the country's history and tourist charm. There were also marionette exhibits and Czech animation viewings, highlighting the truly wide selection of attractions that attendees had to enjoy. There was also a panel displaying the 50 year history of ICC Kyoto at the 50th Anniversary Commemoration booth, where we shared the defining events and achievements in the history of

the conference center.

The second half of the event featured a raffle that brought great excitement to the crowd, with prizes including round-trip airline tickets to Europe. After that was the main event, the fireworks display. It began with a dazzling laser light show, followed by one massive fireworks blast after another. The finale dazzled with a volley of dynamic fireworks that spelled out "ICC Kyoto 50th Anniversary" in the night sky, and bursts of shining glitter-dust from "Niagara" fireworks that fall slowly and gently, lowering the curtain on the event. It was a stirring finish for the crowds of attendees to admire.



Event Calendar in 2016

As of September, 2016

Date	Event	Participants
Jan. 22-24	Junior Chamber International Japan Kyoto Conference 2016	14,000
Mar. 23-24	2015 TPM Awards Ceremony	450
Apr. 3-7	The 13th International Congress of Human Genetics (ICHG 2016)	3,000
Apr. 8-10	The 56th Annual Meeting of the Japanese Respiratory Society	7,500
Apr. 21-23	The 89th Annual Meeting of the Japan Endocrine Society	3,000
Apr. 28-30	The 64th Annual Meeting of The Japan Society of Transfusion Medicine and Cell Therapy	3,000
May 19-21	The 59th Annual Meeting of the Japan Diabetes Society	15,000
May 27-29	Ultrasonic Week 2016 89th JSUM (The 89th Annual Scientific Meeting of the Japan Society of Ultrasonics in Medicine) 12th AFSUMB (The 12th Congress of the Asian Federation of Societies for Ultrasound in Medicine and Biology) JABTS36 (The 36th Meeting of Japan Association of Breast and Thyroid Sonology) 8th ACUCI (The 8th Asian Conference on Ultrasound Contrast Imaging)	6,000
Jun. 3-5	The 115th Annual Meeting of the Japanese Dermatological Association	6,000
Jun. 9-11	The 53rd Annual Meeting of the Japanese Association of Rehabilitation Medicine	8,000
Jun. 17-18	The 21st Congress of the Japanese Society for Palliative Medicine	7,500
Jul. 7-9	The 4th Annual Meeting of Asian Organization for Crohn's & Colitis (AOCC 2016)	700
Aug. 1-5	9th Pacific Rim International Conference on Advanced Materials and Processing (PRICM9)	1,300
Aug. 20-28	Ram Katha Kyoto by Morari Babu	750
Aug. 21-26	The XXVIIth International Conference on Magnetic Resonance in Biological Systems	800
Aug. 28-Sep. 2	IAAP Congress in Kyoto 2016 (XX International Congress for Analytical Psychology)	1,000
Sep. 8-10	RubyKaigi 2016	700
Sep. 17-19	The 26th Annual Meeting of the Japanese Society of Pharmaceutical Health Care and Sciences	7,000
Oct. 2-4	Science and Technology in Society <i>forum</i> (STS <i>forum</i>) 2016, the 13th Annual Meeting	1,200
Oct. 11-15	HCV 2016 (23rd International Symposium on Hepatitis C Virus and Related Viruses)	700
Oct. 17-22	26th IAEA Fusion Energy Conference	1,200
Oct. 23-26	40th World Congress of the International College of Surgeons	3,000
Nov. 3-6	The 70th Annual Congress of Japan Clinical Ophthalmology	7,000
Nov. 10-12	The 2016 Kyoto Prize	3,000
Dec. 2-4	ISCHF Congress 2016 (International Society of Cardiomyopathies and Heart Failure)	300

(Events with more than 300 estimated participants)