

NEWS

In response to the announcement that President Tasuku Honjo won the 2018 Nobel Prize in physiology or medicine on October 1, 2018, a press conference was held

In response to the announcement that Tasuku Honjo, President of the Foundation for Biomedical Research and Innovation at Kobe (hereinafter referred to as "Foundation") won the 2018 Nobel Prize in physiology or medicine, Dr. Masayoshi Murakami, Senior Executive Director of the Foundation (at right in the photo) and Dr. Akio Ohta, Professor at the Laboratory of Immunology, Institute of Biomedical Research and Innovation (at left in the photo) held a press conference at 19:00 on Monday, October 1, 2018.



Press conference

[About the prize]

2018 Nobel Prize in physiology or medicine

▪Prize winner Dr. Tasuku Honjo

President of the Foundation for Biomedical Research and Innovation at Kobe
Deputy Director-General and Distinguished Professor of Kyoto University
Institute for Advanced Study

Dr. James P Allison

University of Texas MD Anderson Cancer Center (U.S.)

▪Prize motivation Discovery of cancer therapy by inhibition of negative immune regulation

[Comment by Dr. Masayoshi Murakami, Senior Executive Director]

I am very pleased to receive the good news that Tasuku Honjo, President of the Foundation for Biomedical Research and Innovation at Kobe, won the 2018 Nobel Prize in physiology or medicine.

Prof. Honjo, who was then the dean of the medical school of Kyoto University, was engaged in the establishment and operation of the Kobe Biomedical Innovation Cluster promoted by Kobe City. Since the establishment of the Foundation in 2000, as a board member, Prof. Honjo had given instruction and advice to the researchers for some time. Since July 2015, as President of the Foundation, Prof. Honjo has taken leadership in management of the Foundation and promotion of the Kobe Biomedical Innovation Cluster.

In April 2018, under Prof. Honjo's leadership, the Foundation restructured its organization to promote sustainable growth of the Kobe Biomedical Innovation Cluster and accelerate innovation inside the cluster, and changed its name from the Foundation for Biomedical Research and Innovation to the Foundation for Biomedical Research and Innovation at Kobe. In this manner, in both name and reality, the new organization is devoting itself to promotion of the biomedical cluster.

Prof. Honjo has become the "face" of the Kobe Biomedical Innovation Cluster. The news that Prof. Honjo, the face of the cluster, won the Nobel Prize serves as a strong tail wind for the cluster. I am very pleased to have the opportunity to promote the cluster more strongly to the world and achieve a greater leap forward in the future.

Prof. Honjo has been active not only as President of the Foundation but also as a researcher. In Kobe, he launched the research project in collaboration with Meiji Seika Pharma Co., Ltd. in April 2016. He plays the role of director of the program titled "drug discovery research into autoimmune diseases and cancers." Furthermore, he launched the research project in collaboration with Sysmex Corporation and Kyoto University in April 2018. As the director of this program, he has been involved in the "developing technologies for diagnosing immunological diseases" (conducted as a part of the drug discovery innovation program). Prof. Honjo's winning of the Nobel Prize is expected to further boost his research activities in Kobe.

Prof. Honjo, who values the policies and basic principles, manages the Foundation for Biomedical Research and Innovation at Kobe meticulously and appropriately.

He has become even busier than before since he received the Nobel Prize. We will provide full support for him to alleviate his stress, if only a little.

As members of the honorable foundation having a Nobel laureate as President, we will work together on our mission for the sake of further development of the Kobe Biomedical Innovation Cluster.

[Comment by Dr. Akio Ohta, Professor at the Laboratory of Immunology]

Prof. Honjo encouraged the researchers around him by saying, "While you are studying, you should set a goal of treating any one disease and saving patients." He thinks that it is the researchers' responsibility to aim at and consider such a goal and devote themselves to research activities.

Prof. Honjo likes to be involved in studies and takes a direct approach to research projects.

Among various researchers, he is a type of researcher who strictly checks data and pursues the truth on the basis thereof.

Programmed cell death protein 1 (PD-1), which he identified, is a molecule that acts as the brakes of the host immune system. (Prof. Honjo often compares this mechanism to the brakes and accelerator of a car.) PD-1 stimulation, which lowers immunity, does not serve well as a method of cancer treatment. The research for which the prize was awarded this time is based on the idea that cancer can be cured by releasing the function that suppresses immunity (brakes).

Of the joint research projects that are underway in Kobe, one has been promoted from the viewpoint that if this mechanism is used in the reverse direction and the PD-1 brakes are regulated in a manner so as to artificially enhance them, it can contribute to the treatment of autoimmune diseases characterized by excessively severe inflammation.

Whenever Prof. Honjo visits Kobe, he takes time to participate in the research meeting scheduled during a limited time and discuss with all the laboratory staff members. In the meeting, he also discusses with graduate students and closely checks elementary data. We are strongly impressed by his basic attitude toward researches.

- Main research activities of the Laboratory of Immunology

- <https://www.fbri-kobe.org/english/laboratory/research1/>

- Drug Discovery Innovation Promotion Program

- http://kakuninweb.info/nobelprize/pdf/1009_OpenInnovation_en.pdf

[Comment by Dr. Hiroo Imura, Honorary Chairman]

Prof. Honjo has taken the molecular biological approach and contributed significantly to the development of immunology. He won this prize for his discovery of PD-1, one of the molecules he had studied. The immune-suppressing effect of PD-1 has been reported and the creation of an antibody against PD-1 has proved to serve well in cancer treatment. As a result of the development of gene mutation, cancer is supposed to be attacked by the immune system. According to recent findings, however, cancer deliberately evades the immune system's attack by using PD-1 or cytotoxic T-lymphocyte-associated antigen 4 (CTLA-4) discovered by Prof. Allison of the U.S., who shared the Nobel Prize with Prof. Honjo. Therefore, if the effects of these substances are blocked by the antibody, the cancer comes under the immune system's attack and can be treated successfully.

Cancer ranks highest among the causes of death in Japan. I am especially pleased to send my sincere congratulations to Prof. Honjo who has developed the new treatment method for cancer and produced such excellent achievements.

[Related website]

- Message from Tasuku Honjo, President of the Foundation for Biomedical Research and Innovation at Kobe (April 2018 when the foundation was launched)
<https://www.fbri-kobe.org/english/about/>