



Annual address to begin a new fiscal year

On April 1, 2024, Dr. Shinya Yamanaka, President of the Foundation, said to assembled staff members during his FY2024 annual address: “It has been four years since we started our activities as a public interest incorporated foundation. Researchers from other institutions are conducting clinical trials using cells provided by us. I believe some of them are nearing publishing of their study results. We are engaged in activities directly related to human life and well-being by providing those cells. To provide even higher quality cells, let's reflect on our work, value teamwork, and continue to work hard.”



Hanamizuki Award Ceremony

This award was established to recognize staff members or departments whose achievements contribute to the development of the CiRA Foundation. The individual award winner received a certificate of commendation and a cash prize of several hundred thousand yen. The winners of the Director's Special Recognition Award were presented with a certificate and a plaque.

Winner of the 4th Hanamizuki
Individual Award

Asami Takeuchi
Assistant Manager, General Affairs Office

Contributed to the smooth operation of the Board of Directors and the Board of Trustees.



Winners of the 4th Hanamizuki
Director's Special Recognition Award

Philanthropy Office
Takayo Hosokawa,
Fumitaka Watanabe,
Keisuke Yamamoto, Miho Ide,
Miki Tanigawa, Koichi Ishida, and Miki Taniuchi



Based on data analysis and advertising strategies, donations received in FY2023 were approximately four times the amount since its establishment.

Giving Report 2023

The CiRA Foundation is financed by public funds, business profits, and donations. In FY2023, we received over 2.8 billion yen in donations from individuals and corporations.

Thank you very much for supporting the CiRA Foundation.

Donation Amount (April 1, 2023—March 31, 2024)

	Number of donations	Amount of donations
Membership	118	37,440,000 yen
Donations	310,548	2,840,820,905 yen
Total	310,666	2,878,260,905 yen

Until FY2022, grant support from large-scale government research projects accounted for a large amount of the Foundation's operating expenses. The Foundation will continue to strive to secure funding support, we expect donations to account for a larger proportion of our future operating expenses. Thank you very much for your continued support of the Foundation.



Naoko Takasu,
Executive Director

We manufacture iPS cells for medical use, which are used as raw materials for transplantation. To produce high-quality iPS cells, we use expensive materials, reagents, and equipment for production, quality assurance, and research and development for practical use. The following is a partial list of items purchased in FY2023 using donations:

1 Protein verification equipment

This equipment is for checking whether iPS cells and differentiated cells for treatment maintain their proper functions.

For example, if an iPS cell has a high amount of protein A, we check if it contains the appropriate amount of A protein. This instrument is used in our iPS cell quality assurance tests, and we have just purchased a second unit to conduct even more quality evaluations.



2 System for isolating target cells

When producing iPS or differentiated cells, it is necessary to isolate only the target cells with high accuracy and purity. For example, when producing iPS cells, it is necessary to select only those with excellent properties as iPS cells. With this device, the desired cells can be extracted in a completely closed machine without exposing the cells to the environment.



3 Closed automated cell production equipment

We research automation of iPS cell production using this device. We believe automation can lower production costs and improve the quality of iPS cells or their derivatives compared to manual production. In addition to the photo on the right, we also conduct research and development using a variety of other equipment for automation.

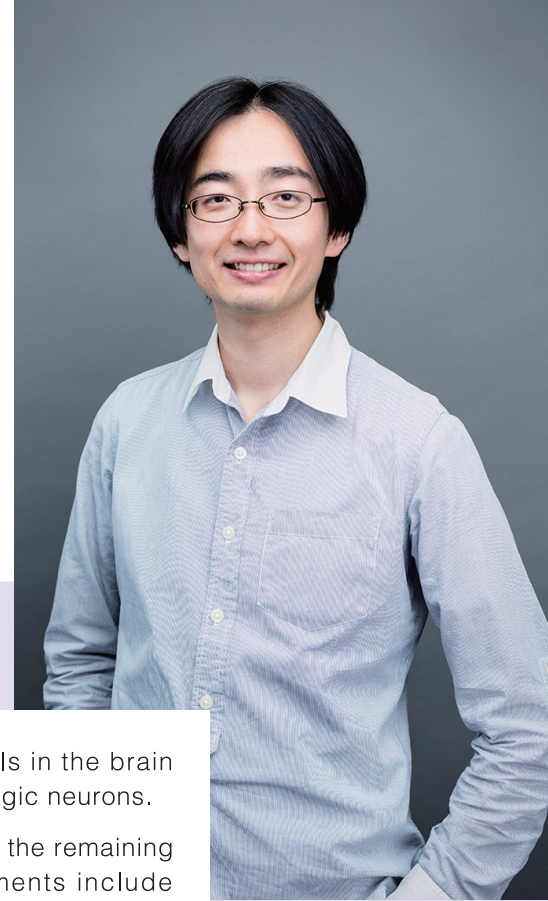


Physician-initiated clinical trials for Parkinson's disease in Japan

At the Center for iPS Cell Research and Application (CiRA), Kyoto University, about 30 research groups are conducting basic research related to iPS cells and research aimed at medical applications for various diseases.

We interviewed Hiroyuki Wadahama, a science communicator at CiRA, about the clinical trial for the treatment of Parkinson's disease using iPS cell-derived dopamine neural progenitor cells, which was conducted as a partnership between Kyoto University Hospital and CiRA between 2018 and 2023.

HIROYUKI WADAHAMA INTERVIEW



Q1 Please tell us about the conventional treatment of Parkinson's disease in Japan.

Parkinson's disease is caused by a decrease in the number of nerve cells in the brain that produce a substance called dopamine, otherwise known as dopaminergic neurons.

The conventional treatment for Parkinson's disease is to use drugs to make the remaining dopamine neurons in the brain produce more dopamine. Other treatments include implanting electrodes in the brain and applying electrical stimulation from outside the body to supplement the function of dopamine neurons. However, none of these treatments can stop the degeneration of dopamine neurons, so the disease worsens.

Q2 What kind of research has been conducted on Parkinson's disease at CiRA?

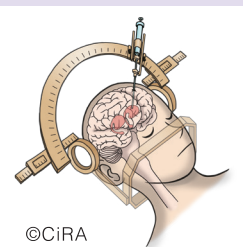
In the laboratory of Professor Jun Takahashi, research has been conducted to cure Parkinson's disease by creating dopamine neurons in the brain from iPS cells and transplanting them into patients. After conducting a series of studies, including the development of technology to create neurons from iPS cells and animal experiments on how to transplant neurons into the brain, his team carefully proceeded to a clinical trial.

Q3 What are the main objectives of this clinical trial?

The main objective is to determine whether the transplantation of dopamine neurons created from iPS cells into Parkinson's disease patients is safe and effective.

Q4 The transplantable cells (dopamine neural progenitor cells) used in this clinical trial were produced from the CiRA Foundation's HLA homozygous iPS cells. What kind of surgery was performed?

A 12 mm diameter hole was drilled in the skull, and a needle-like instrument was used to inject dopamine neurons produced from the iPS cell stock. The transplantation surgery for this clinical trial was performed at Kyoto University Hospital.



Q5 What is the latest information?

At the end of 2023, the scheduled transplant surgeries and follow-up observations for seven patients were completed. So far, no serious adverse events have been reported. Takahashi's lab plans to analyze the data in 2024 and publish the results in a scientific paper when they complete the analysis.

Q6 How to make medical care accessible to more people?

It takes a long time to establish a new treatment method through rigorous scientific validation. If the results of this clinical trial show that the treatment is safe and effective, an application will be submitted to the Japanese government to approve the treatment first before it can be made available to more patients.

Agreement Signed with CIRM, U.S.A.

The California Institute for Regenerative Medicine (CIRM) is an organization that aims to promote the practical application of stem cells, gene therapy, and regenerative medicine. The agreement will enable the CiRA Foundation to participate in CIRM's program as an "Industry Resource Partner." The agreement will enable the CiRA Foundation to readily deliver iPS cells for regenerative medicine and information to universities, companies, and projects supported by CIRM.

C I R M
CALIFORNIA INSTITUTE FOR
REGENERATIVE MEDICINE



U.S. Drug Master File Registration

We have registered two of our HLA homologous iPS cell lines with the U.S. Food and Drug Administration (FDA) Drug Master File (DMF) to help companies conducting research and development on regenerative medicine using our iPS cells to readily apply for approval in the U.S.



Begins Collaborative research with Terumo

Terumo Blood and Cell Technologies (Terumo BCT) and the CiRA Foundation started collaborative research to create a closed, automated, integrated process that can consistently produce high-quality iPS Cells.



Official Website Renewal

CiRA Foundation has renewed its official website to make the design and structure easier for visitors to view and understand.

