

Masayo TAKAHASHI

M.D., Ph.D.



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EDUCATION

- **1992** : Ph.D. in Ophthalmology and Visual Science at Kyoto University
- **1986** : M.D. from Faculty of Medicine, Kyoto University

EXPERTISE

- Ophthalmology
- iPSCs transplantation to animals and human

OTHERS

Dr. Takahashi completed the first successful transplant of iPSC-derived retinal cells into the eye of a patient in 2017.

ACADEMIC APPOINTMENTS

Dr. Takahashi is a Japanese ophthalmologist and stem cell researcher. She served as an assistant professor in the Kyoto University Hospital after Ph.D. graduation. She discovered the potential of stem cells as a tool for retina therapy when she moved to the Salk Institute, U.S. She joined RIKEN in 2006, her team launched a pilot clinical study using iPSCs first in human in 2013. She started a new carrier, a president of startup company; Vision Care Inc., to proceed implement clinical therapy.

- **2019 - present** : The CEO of Vision Care Inc. and subsequently founded two subsidiary companies dedicated to gene therapy development and cell therapy research
- **2017** : Collaboration with the city of Kobe to establish the "Kobe Eye Center"
- **2014** : She was placed on Nature magazine's "Nature's 10 2014" for carrying out the first-ever induced pluripotent stem cell clinical study for the treatment of age-related macular degeneration
- **2006 - 2022** : The leader of the Laboratory for Retinal Regeneration, RIKEN Center for Biosystems Dynamics Research
- **2001** : Assistant professor at the Translational Research Center in Kyoto University Hospital
- **1995** : Researcher at the Salk Institute for Biological Studies

AWARDS AND HONORS

- **2014** : British science journal Nature named her as one of five global scientists to watch
- **2015** : The Ogawa Yamanaka Prize in Stem Cell Biology

SELECTED PUBLICATIONS

1. Hiram, Y., Mandai, M., Sugita, S., Maeda, A., Maeda, T., Yamamoto, M., Uyama, H., Yokota, S., Fujihara, M., Igeta, M., Daimon, T., Fujita, K., Ito, T., Shibatani, N., Morinaga, C., Hayama, T., Nakamura, A., Ueyama, K., Ono, K., Ohara, H., Fujiwara, M., Yamasaki, S., Watari, K., Bando, K., Kawabe, K., Ikeda, A., Kimura, T., Kuwahara, A., Takahashi, M., Kurimoto, Y. 2023. Safety and stable survival of stem-cell-derived retinal organoid for 2 years in patients with retinitis pigmentosa. *Cell Stem Cell*. 30: 1585-1596.
2. Iwama, Y., Nomaru, H., Masuda, T., Kawamura, Y., Matsumura, M., Murata, Y., Teranishi, K., Nishida, K., Ota, S., Mandai, M., Takahashi, M. 2023. Label-free enrichment of human pluripotent stem cell-derived early retinal progenitor cells for cell-based regenerative therapies. *Stem Cell Reports*. 19: 1-16.
3. Mandai, M., Watanabe, A., Kurimoto, Y., Hiram, Y., Morinaga, C., Daimon, T., Fujihara, M., Akimaru, H., Sakai, N., Shibata, Y., Terada, M., Yui Nomiya, Y., Tanishima, S., Nakamura, M., Kamao, H., Sugita, S., Onishi, A., Ito, T., Fujita, K., Kawamata, S., Go, M.J., Shinohara, C., Hata, K., Sawada, M., Yamamoto, M., Ohta, S., Ohara, Y., Yoshida, K., Kuwahara, J., Kitano, Y., Amano, N., Umekage, M., Kitaoka, F., Tanaka, A., Okada, C., Takasu, N., Ogawa, S., Yamanaka, S., Takahashi, M. 2017. Autologous Induced Stem-Cell-Derived Retinal Cells for Macular Degeneration. *New England Journal of Medicine*. 376(11): 1038-1046.