Stanford



Masashi Miyauchi

Postdoctoral Scholar, Stem Cell Biology and Regenerative Medicine

Bio

BIO

Masashi Miyauchi, MD, PhD, is a physician-scientist specializing in hematology, oncology, immunology, and stem cell biology, with over a decade of experience in clinical hematology and oncology. Dr. Miyauchi's academic career commenced at Kyoto University, where he obtained his MD in Medicine. He furthered his expertise with a PhD in Internal Medicine from The University of Tokyo, Graduate School of Medicine. Following his comprehensive clinical training and professional appointments at The University of Tokyo Hospital, Dr. Miyauchi embarked on a postdoctoral journey at Stanford University in the Nakauchi lab, starting in July 2019. Dr. Miyauchi's clinical training is extensive, including a Senior Residency in Internal Medicine and a Clinical Fellowship in Hematology and Oncology at The University of Tokyo Hospital. This period was complemented by his participation in a Cancer Professional Training Plan. After completing his clinical fellowship, Dr. Miyauchi has served in various pivotal roles at The University of Tokyo Hospital and The University of Tokyo. His positions as a clinically-focused Project Assistant Professor and Assistant Professor in the Department of Hematology and Oncology have enabled him to contribute significantly to pioneering research and education for the next wave of medical professionals.

In his PhD research, Dr. Miyauchi specialized in the disease modeling of cancers and cancer stem cells, employing cancer patient-specific induced pluripotent stem cells (iPSCs). His work with iPSCs notably includes scalable ex vivo manufacturing of human neutrophils. In his postdoctoral research under the guidance of Dr. Hiromitsu Nakauchi in Genetics at Stanford, Dr. Miyauchi has been concentrating on developing a stable hematopoietic stem cell (HSC) expansion system in both mouse and human models. His research is focused on exploring the potential applications of this expansion system, underlining his commitment to advancing the fields of stem cell biology, regenerative medicine and oncology.

INSTITUTE AFFILIATIONS

• Member, Maternal & Child Health Research Institute (MCHRI)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Board Certified Hematologist, Japanese Society of Hematology (2017 present)
- Board Certified Occupational Physician, , Japanese Medical Association (2018 present)

PROFESSIONAL EDUCATION

- Doctor of Medicine, Kyoto University (2009)
- Doctor of Philosophy, University Of Tokyo (2019)
- Clinical Fellow, The University of Tokyo Hospital , Hematology (2017)
- Clinical Traninig, The University of Tokyo, Clinical Oncology (2015)
- Doctor of Philosophy, The University of Tokyo, Medicine (2015)
- Doctor of Medicine, Kyoto University (2009)

STANFORD ADVISORS

- Hiro Nakauchi, Postdoctoral Research Mentor
- Hiro Nakauchi, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

• Efficient production of human neutrophils from iPSCs that prevent murine lethal infection with immune cell recruitment. Blood Masashi, M., Ito, Y., Nakahara, F., Hino, T., Nakamura, F., Iwasaki, Y., Kawagoshi, T., Koya, J., Yoshimi, A., Arai, S., Kagoya, Y., Kurokawa, M. 2021

• Difference of preventing effects of G-CSF according to age in patients with malignant lymphoma: A nation-wide analysis in Japan. Journal of infection and chemotherapy: official journal of the Japan Society of Chemotherapy

Matsuda, K., Jo, T., Miyauchi, M., Toyama, K., Nakazaki, K., Matsui, H., Fushimi, K., Yasunaga, H., Kurokawa, M. 2021; 27 (8): 1151-1155

A retrospective analysis on arteritis after administration of granulocyte colony-stimulating factor. Annals of hematology

Sasaki, K., Matsuda, K., Miyauchi, M., Honda, A., Shimura, A., Masamoto, Y., Kurokawa, M. 2021; 100 (5): 1341-1343

Loss-of-function mutations in BCOR contribute to chemotherapy resistance in acute myeloid leukemia. Experimental hematology

Honda, A., Koya, J., Yoshimi, A., Miyauchi, M., Taoka, K., Kataoka, K., Arai, S., Kurokawa, M. 2021; 101-102: 42-48.e11

• CAMK2G is identified as a novel therapeutic target for myelofibrosis. Blood advances

Miyauchi, M., Sasaki, K., Kagoya, Y., Taoka, K., Masamoto, Y., Yamazaki, S., Arai, S., Mizuno, H., Kurokawa, M. 2021

 Primary prophylaxis with pegfilgrastim in patients with newly-diagnosed diffuse large B-cell lymphoma: propensity score and instrumental variable analyses. Leukemia & lymphoma

Matsuda, K. n., Taisuke, J. n., Miyauchi, M. n., Toyama, K. n., Nakazaki, K. n., Matsui, H. n., Fushimi, K. n., Yasunaga, H. n., Kurokawa, M. n. 2020; 61 (10): 2435-41

Significance of biopsy with ERCP for diagnosis of bile duct invasion of DLBCL. International journal of hematology

Ito, Y. n., Miyauchi, M. n., Nakamura, T. n., Takahara, N. n., Nakai, Y. n., Taoka, K. n., Toyama, K. n., Shinozaki-Ushiku, A. n., Koike, K. n., Kurokawa, M. n.

Arteritis after administration of granulocyte colony-stimulating factor: a case series. International journal of hematology

Sasaki, K. n., Miyauchi, M. n., Ogura, M. n., Shimura-Nukina, A. n., Toyama, K. n., Nakazaki, K. n., Watadani, T. n., Abe, O. n., Kurokawa, M. n.

 Using patient-derived iPSCs to develop humanized mouse models for chronic myelomonocytic leukemia and therapeutic drug identification, including liposomal clodronate. Scientific reports

Taoka, K. n., Arai, S. n., Kataoka, K. n., Hosoi, M. n., Miyauchi, M. n., Yamazaki, S. n., Honda, A. n., Aixinjueluo, W. n., Kobayashi, T. n., Kumano, K. n., Yoshimi, A. n., Otsu, M. n., Niwa, et al 2018; 8 (1): 15855

 ADAM8 Is an Antigen of Tyrosine Kinase Inhibitor-Resistant Chronic Myeloid Leukemia Cells Identified by Patient-Derived Induced Pluripotent Stem Cells. Stem cell reports

Miyauchi, M. n., Koya, J. n., Arai, S. n., Yamazaki, S. n., Honda, A. n., Kataoka, K. n., Yoshimi, A. n., Taoka, K. n., Kumano, K. n., Kurokawa, M. n. 2018; 10 (3): 1115-30

• Modeling of hematologic malignancies by iPS technology. Experimental hematology

Arai, S. n., Miyauchi, M. n., Kurokawa, M. n. 2015; 43 (8): 654-60

• Targeted gene correction of RUNX1 in induced pluripotent stem cells derived from familial platelet disorder with propensity to myeloid malignancy restores normal megakaryopoiesis. Experimental hematology

Iizuka, H. n., Kagoya, Y. n., Kataoka, K. n., Yoshimi, A. n., Miyauchi, M. n., Taoka, K. n., Kumano, K. n., Yamamoto, T. n., Hotta, A. n., Arai, S. n., Kurokawa, M. n.

2015; 43 (10): 849-57

• [Induced pluripotent stem cells from leukemia patients as a platform for dissecting pathogenesis]. [Rinsho ketsueki] The Japanese journal of clinical hematology

Kurokawa, M., Miyauchi, M.

2014; 55 (10): 2202-7

• Efficacy of pleural biopsy for diagnosis of pleural effusion due to chronic GVHD after hematopoietic stem cell transplantation. International journal of hematology

Miyauchi, M. n., Yoshimi, A. n., Nannya, Y. n., Takazawa, Y. n., Ichikawa, M. n., Fukayama, M. n., Kurokawa, M. n. 2012; 96 (1): 146–48

• Pituitary lymphoma developing within pituitary adenoma. International journal of hematology

Morita, K. n., Nakamura, F. n., Kamikubo, Y. n., Mizuno, N. n., Miyauchi, M. n., Yamamoto, G. n., Nannya, Y. n., Ichikawa, M. n., Kurokawa, M. n. 2012; 95 (6): 721–24