Masaki Ieda

Masaki Ieda M.D., Ph.D.
Professor and Chair, Department of Cardiology,
Faculty of Medicine, University of Tsukuba
1-1-1 Tennoudai, Tsukuba City, Ibaraki, 305-8575, Japan
Tel: +81-29-853-7515, Fax: +81-29-853-7515, E-mail: mieda@md.tsukuba.ac.jp

Education

2005 Ph.D. Doctor of Medical Science, Department of Medicine, Keio University School of Medicine, Tokyo, Japan
1995 M.D. Keio University School of Medicine, Tokyo, Japan

Experience

2018-Present **Professor and Chair,** Department of Cardiology, Faculty of Medicine, University of Tsukuba
2010-2018 **Associate Professor,** Department of Cardiology, Keio University School of Medicine
2010-2016 **Research Director,** Japan Science and Technology Agency (JST) - CREST
2007-2010 **Postdoctoral Fellow**, Gladstone Institute of Cardiovascular Disease, University of California, San Francisco, USA
2005-2007 **Instructor**, Cardiopulmonary Division, Department of Medicine, Keio University School of Medicine
1999-2005 **Clinical and Research Fellow**, Cardiopulmonary Division, Department of Medicine, Keio University School of Medicine,
1997-1999 **Clinical Fellow,** Internal Medicine, Ashikaga Red-Cross Hospital and Saiseikai Utsunomiya Hospital, Tochigi, Japan
1995-1997 **Resident**, Internal Medicine, Keio University School of Medicine,

Awards

The Commendation for Science and Technology by the Minister of Education, Culture, Sports, Science and Technology
Awards for Science and Technology, 2020
The Japanese Heart Failure Society
Outstanding Investigator Award, 2017
The Japanese Circulation Society
Sato's Award, 2016
Cardiovascular Regeneration Medical Science Award, 2011
Yagi's Award, 2007
Young Investigator's Award, 2006
The Japan Society for the Promotion of Science
JSPS PRIZE, 2012
Keio University School of Medicine
Sanshikai Kitazato Award, 2012
Sanshikai Award for Young Investigator, 2009
The Japanese Society for Regenerative Medicine
The Johnson & Johnson Innovation Award, 2011
The Japan Medical Association
Medical Research Encouragement Prize, 2011
American Heart Association.

Louis N. & Arnold M. Katz Young Investigator Award, 2008

Selected Publications

1. Muraoka N, Nara K, Tamura F, ,,, **Ieda M**. Role of cyclooxygenase-2-mediated prostaglandin E2-prostaglandin E receptor 4 signaling in cardiac reprogramming. ***Nat Commun.*** 10(1):674, 2019.
2. Sadahiro T, Isomi M, Muraoka N,,, **Ieda M**. Tbx6 Induces Nascent Mesoderm from Pluripotent Stem Cells and Temporally Controls Cardiac versus Somite Lineage Diversification. ***Cell Stem Cell.*** 23(3):382-395, 2018.
3. Miyamoto K, Akiyama M, Tamura F,,, **Ieda M**. Direct In Vivo Reprogramming with Sendai Virus Vectors Improves Cardiac Function after Myocardial Infarction. ***Cell Stem Cell.*** 22(1):91-103, 2018.
4. Yamakawa H, Muraoka N, Miyamoto K,,, **Ieda M**. Fibroblast Growth Factors and Vascular Endothelial Growth Factor Promote Cardiac Reprogramming under Defined Conditions. ***Stem Cell Reports.*** 5(6):1128-42, 2015.
5. Sadahiro T, Yamanaka S, **Ieda M**. Direct Cardiac Reprogramming: Progress and Challenges in Basic Biology and Clinical Applications. ***Circ Res.*** 116(8):1378-1391, 2015.
6. Muraoka N, I**eda M**. Stoichiometry of transcription factors is critical for cardiac reprogramming. ***Circ Res.*** 116(2):216-8, 2015.
7. Muraoka N, Yamakawa H, Miyamoto K,,, **Ieda M.** MiR-133 promotes cardiac reprogramming by directly repressing Snai1 and silencing fibroblast signatures. ***EMBO J.*** 33(14):1565-81 2014.
8. Wada R, Muraoka N, Inagawa K,, **Ieda M.** Induction of human cardiomyocyte-like cells from fibroblasts by defined factors. ***PNAS.*** 110 (31):12667-72. 2013
9. Inagawa K, Miyamoto K, Yamakawa H,,,, and **Ieda, M**. Induction of Cardiomyocyte-like Cells in Infarct Hearts by Gene Transfer of Gata4, Mef2c, and Tbx5. ***Circ Res*** 2012.
10. Srivastava, D. and **Ieda, M.** Critical factors for cardiac reprogramming. ***Circ Res*** 111:5-8: 2012.
11. **Ieda, M.**, Fu, J.D., Delgado-Olguin, P., Vedantham, V., Hayashi, Y., Bruneau, B.G., and Srivastava, D. Direct Reprogramming of Fibroblasts into Functional Cardiomyocytes by Defined Factors. ***Cell*** 142:375-386. 2010.
12. **Ieda, M.**, Tsuchihashi, T., Ivey, K.N., Ross, R.S., Hong, T.T., Shaw, R.M., and Srivastava, D. Cardiac fibroblasts regulate myocardial proliferation through beta1 integrin signaling. ***Dev Cell*** 16:233-244. 2009.
13. **Ieda, M.**, Kanazawa, H., Kimura, K., ,, Fukuda, K. Sema3a maintains normal heart rhythm through sympathetic innervation patterning. ***Nat Med*** 13:604-612. 2007.
14. **Ieda, M.**, Kanazawa, H., Ieda, Y., Kimura, K., Matsumura, K.,, Fukuda, K. Nerve growth factor is critical for cardiac sensory innervation and rescues neuropathy in diabetic hearts. ***Circulation*** 114:2351-2363. 2006.
15. **Ieda, M.**, Fukuda, K., Hisaka, Y., Kimura, K., Kawaguchi, H.,, Ogawa S. Endothelin-1 regulates cardiac sympathetic innervation in the rodent heart by controlling nerve growth factor expression. ***J Clin Invest*** 113:876-884. 2004.