



Gentaro Ikeda

Postdoctoral Research Fellow, Cardiovascular Medicine

Bio

BIO

My long-term goal is to become a physician scientist and develop innovative diagnostic and therapeutic modalities for patients with cardiovascular disease. Based on my experience as a cardiologist for the past 5 years, I have become aware of major clinical shortcomings, specifically in the current pharmaceutical therapies for myocardial infarction (MI) and chronic heart failure (HF). Some evidence-based drug therapies, including β -blockers, ivabradine, and renin–angiotensin–aldosterone antagonists are difficult to apply to critical patients due to adverse side effects. Drugs that have shown efficacy in basic animal experiments have failed to show significant benefits in clinical trials. To address these problems, I moved to academia to conduct translational research. During my graduate training in the Egashira Lab, I focused on drug delivery systems (DDS) that target mitochondria in animal models of MI. I obtained advanced skills in molecular biology, mitochondrial bioenergetics, and animal surgery. I realized the importance of translational research and the great potential of DDS to overcome many clinical problems. I developed nanoparticle-mediated DDS containing cyclosporine for the treatment of patients with MI. I published a first author paper and received academic awards for my novel science. Since becoming a postdoctoral fellow in the Yang Lab, I have continued to build upon my previous training in translational research. I am currently developing an innovative therapy, namely, extracellular vesicles-mediated mitochondrial transfer for the failing heart.

PROFESSIONAL EDUCATION

- PhD, Kyushu University (2016)
- MD, Showa University (2007)