

Atsushi Hoshino, MD, PhD, is an Assistant Professor of Cardiovascular Medicine at Kyoto Prefectural University of Medicine. He graduated from Kyoto Prefectural University of Medicine in 2003 and received his PhD degree from the same institution in 2012, working with Satoaki Matoba on mitophagy in heart disease and diabetes. He completed his postdoctoral research training under the direct mentorship of Zoltan Arany at the University of Pennsylvania, where he conducted CRISPR library screening to gain a deeper understanding of the mechanisms underlying mitophagy. In 2017, he accepted his current position and expanded his research into bioengineering. Using his own pipeline based on saturation mutagenesis and a multi-mutations library, he developed a highly potent small AsCas12f with clinical implications for exon skipping in Duchenne muscular dystrophy, and is now working on other genome editing tools, including all-in-one AAV carrying base editors for genetic heart disease and others.