

Dr. Seiko Ohno started researching inherited arrhythmias at Kyoto University Graduate School of Medicine in 2002 after training as a cardiologist at Japanese Red Cross Wakayama Medical Center. After graduation, she continued molecular and electrophysiological studies at Shiga University of Medical Science (SUMS). In SUMS, she introduced a next-generation sequencer (NGS) for the genetic screening of inherited cardiovascular diseases and found a lot of pathogenic variants in her field. In 2018, she moved to National Cerebral and Cardiovascular Center as the director of cardiovascular genetics and started the study using knock-in mouse models with pathogenic variants, which she found in patients with inherited cardiovascular diseases. In addition, she started the study using a long-read sequencer to detect structural variants, which are difficult to detect by a short-read sequencer, a commonly used NGS. These experiments will elucidate the pathogenesis of inherited cardiovascular diseases and lead to the development of new therapies.