

Makiminato Central Hospital, Okinawa, Japan Heart Rhythm Disorders and Heart Failure Clinic Team

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Hospital Overview

Our history: The **Makiminato Central Hospital**, in Okinawa, Japan is an ultraspecialized medical center dedicated to care, prevention, rehabilitation and the administration of new technologies in the cardiovascular field, and was founded in 1977 by Dr. Eiho Yamaguchi. The first open heart surgery, a valve replacement operation was successfully performed in October of 1977. For over 38 years, the Makiminato Central Hospital has grown along with its success and has become one of the largest cardiology institutes in Okinawa due to being a profoundly patient-centered institute from the beginning. Dr. Eiho Yamaguchi has left his successor, the current Director, Dr. Moriichi Sugama with an invaluable mission of the Institute that has been entirely focused on cardiovascular disease. At all times, the Makiminato Central Hospital aims to offer cutting-edge superior-quality care that is based on the latest medical knowledge of the cardiovascular field. Due to an increase in cardiovascular disease related cardiometabolic syndrome, cardiovascular interventions including PCI, catheter ablation, device implantation, and cardiovascular surgery provided by Makiminato Central Hospital have contributed to the improvement of the patient care and public health in Okinawa.



Cardiac Electrophysiology and Pacing Laboratory

Cardiac Electrophysiologists: Director: Dr. Satoshi Higa, MD, PhD, Dr. Sugako Ishigaki, MD, Dr. Akira Maesato, MD, PhD

Dr. Satoshi Higa has completed his Fellowship in Clinical Cardiac Electrophysiology, at the Second Department of Internal Medicine, University of the Ryukyus, Okinawa, Japan (1994-1996). He worked as a research fellow under the eminent professors of basic and clinical electrophysiology, Prof. Cheng-l

Lin (National Defense Medical Center, Taiwan) and Prof. Shih-Ann Chen (Taipei Veterans General Hospital, Taiwan) (2002-2003). After he came back to Japan, he worked in the Hospital, University of the Ryukyus as an electrophysiologist, Course Founder and Director of the Basic and Advanced Course of Catheter Ablation and Pacemaker Devices (2007-2011, *Specialized Training Center, Hospital, University of the Ryukyus*). Further, he along with his team has established the Cardiac Electrophysiology and Pacing Laboratory in Makiminato Central Hospital in 2011. At this laboratory, a team of world-class physicians and medical staff, each specializing in **HEART RHYTHM DISORDERS** and **HEART FAILURE**, work closely together to offer leading comprehensive medical examinations and treatments and preventive care for both common and complex heart conditions. A total of 565 radiofrequency catheter ablation cases including long-lasting persistent AF and organic VTs, and 148 device implantations (PM 83, ICD21, CRTP 4, CRTD35, ILR 5) were being performed in 2014 Jan-2015 Oct.

Heart Rhythm Disorder Clinic

The Cardiac Electrophysiology and Pacing Laboratory, Division of Cardiovascular Medicine, Makiminato Central Hospital's Heart Rhythm Disorder Clinic is regarded as one of the most-experienced EP clinics in Japan due to the team of renowned, board-certified cardiologists with a reputation for excellence in performing catheter ablation and the implantations of pacemakers and defibrillators for arrhythmia patients. During the long-term collaboration with the prominent Professor, Dr. Shih-Ann Chen (Taipei VGH), Dr. Satoshi Higa, the director of this team, has published articles in renowned journals including *Circulation*, *Heart Rhythm*, and *JCE*, and also has written 5 international book chapters, as a leading authority of cardiac electrophysiology and catheter ablation.

Heart Failure and Cardiac Implant Device Clinic

The Cardiac Electrophysiology and Pacing Laboratory, Division of Cardiovascular Medicine, Makiminato Central Hospital's Heart Failure and Device Clinic is recognized for its comprehensive



approach to quality outcomes. This clinic is well organized so that patients with cardiac devices receive high quality care. Our clinic's approach to cardiac device therapy for advanced heart failure, applying a remote monitoring technology, serves as a model for the cardiac device practice in Japan. Dr. Maesato and Dr. Higa published an original article titled "Impact of pacing and high-pass filter settings on ventricular bipolar electrograms in implantable cardioverter defibrillator systems: implication of predictors for inappropriate therapy caused by oversensing of repolarization electrograms." in the *Circulation Journal*. (2011).

Abundant Experience. Our team has expertise and experience in treating heart rhythm disorders using cardiac ablation, devices and other treatment methods. Our doctors have treated thousands of patients with all types of arrhythmias. Our staff are considered to be international experts in diagnosing and treating heart rhythm disorder and heart failure.

Organized Team-based and Cross-specialty Approach. A dedicated team of electrophysiologists and technologists specialized in heart rhythm disorders and heart failure closely cooperate with coronary interventionists (Dr. Uechi, Dr. Maehira, Dr. Tomitaka Higa), cardiovascular surgeons (Dr. Sugama, Dr. Uezu, Dr. Mohri, Dr. Tatsu), and nephrologists (Dr. Nomura). Our team is fortunate to team up with the highly qualified staff and equipment available at Makiminato Central Hospital, which features advanced equipment and provides comprehensive care in a comfortable and friendly environment. "A team without walls" is the integrated Makiminato Central Hospital's vision.

Commitments to Education and Research. Our team is committed to educating patients, physicians, technicians, and nurses about heart rhythm disorders, cardiac implant devices and heart failure. We participate in international research and clinical trials, and also share novel scientific discoveries and the latest innovations for diagnosing and treating arrhythmias and heart failure with others through international conferences and publications.



Advanced Medical Technologies. Our team uses state-of-the-art technologies and performs treatments for arrhythmias and heart failure, including radiofrequency catheter ablation using advanced EP recording and 3D mapping systems and the implantation of cardiac devices in a Hybrid Operating Room (Phillips Allura Xper FD20/10 biplane mixed cardiovascular X-ray system).

Dedicated Access Coordinator. Our team includes two dedicated access coordinators for non-Japanese speaking citizens to take down any relevant information about each patient's condition and symptoms and arrange a prompt evaluation.

Hospital Contact

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Access Information

Makiminato Central Hospital is located in Urasoe City, Okinawa, Japan.

Interests and Our Vision: Comprehensive evaluations and management of patients with complex heart rhythm disorder and advanced heart failure. Electrophysiological studies, 3D mapping and radiofrequency catheter ablation of complex arrhythmias, implantations of Pacemakers, Implantable Cardioverter Defibrillators (ICDs), Cardiac Re-synchronizing Therapy (CRT), and Implantable Loop Recorders.

Dr. Satoshi Higa has a clear vision to improve the health of our surrounding community by providing a compassionate, patient-centered highest quality care and outcome, and to become the world's preeminent medical center in the prevention, diagnosis and treatment of patients with heart rhythm disorders and advanced heart failure.

