

The Moss-Klein
Professorship in Cardiology

HELMUT KLEIN, M.D. (*left*)
and

ARTHUR J. MOSS, M.D.
'62M (RES), '65M (FLW) (*right*)

The
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THE CAMPAIGN *for the*
UNIVERSITY OF ROCHESTER



INTERNATIONAL LEADERS IN TRANSFORMING HEART DISEASE

One of the most effective and productive collaborations in the history of cardiac care takes place here at UR Medicine—and it began more than 25 years ago, when Arthur J. Moss, M.D. and Helmut Klein, M.D., worked in laboratories an ocean apart.

A pioneer in electrophysiology, Dr. Moss worked with Dr. Klein in the late 1980s on device trials for the implantable cardioverter defibrillator (ICD), a device that shocks the heart back into normal rhythm in patients who have potentially deadly arrhythmias. The ICD replaced drug therapies that had dangerous side effects. Moss and Klein completed a second study that broadened eligibility for ICD therapy, transforming heart disease from a death sentence to a chronic but livable condition.

Most recently, this collaboration resulted in a new understanding of cardiac resynchronization therapy (CRT)—a procedure that improves the heart's pumping action—when used in combination with a defibrillator. The resulting therapy is CRT-D, and it can prevent the progression of heart failure in more than 4 million patients who have a mild form of the disease. In a study published in March 2014 in the *New England Journal of Medicine*, Moss and Klein determined that CRT-D saves the lives of mild heart failure patients over the long term, reducing the risk of death by 40 percent.

It is time to recognize the achievements of these two consummate scientists in a powerful and lasting way. Professorships honor acclaimed leaders who perform groundbreaking research, mentor Ph.D. candidates and junior faculty, and attract talented medical students and residents. They also allow our talented scientists, clinicians, and educators to focus on particular clinical challenges and spur advances in those areas.

A named professorship will allow us to honor a current researcher at the University or to attract a new scientist, one who sets the same high standard for life-changing discovery that Drs. Moss and Klein have demonstrated. And it will allow their names to live on in perpetuity at the University, while building on their legacy of saving lives.

ABOUT ARTHUR J. MOSS, MD

Through a career that spans nearly six decades, Arthur Moss, MD, has saved countless lives and changed the treatment of heart disease worldwide. Dr. Moss was one of the first scientists to attempt to unravel the genetic underpinnings of a specific heart condition. His work in Long QT syndrome—which makes the heart susceptible to fatal arrhythmias—led Dr. Moss to help launch the International LQTS Registry, one of the first gene registries for any disease in the world. Gene hunters have used the registry to track down more than 500 genetic mutations involving ten genes that cause various versions of Long QT. Dr. Moss and colleagues have been able develop effective treatments for patients with this disorder, resulting in an 80 percent reduction in life-threatening events.

A UR faculty member for more than 50 years, Dr. Moss has published more than 500 scientific papers on cardiac arrhythmias. He received the 2011 Heart Rhythm Society's Distinguished Scientist Award, and the George Eastman Medal from the University of Rochester for his achievements, dedication, and service to the University.

ABOUT HELMUT KLEIN, MD

Helmut U. Klein, M.D., FESC, FHRS, is former Dean of the Medical Faculty and Professor Emeritus at Otto von Guericke University in Magdeburg, Germany. He serves as Adjunct Professor of Medicine in the Heart Research Follow-up Program at the University of Rochester Medical Center. He received his medical training at the Universities of Bonn and Hannover, and has held various hospital and academic appointments at the University Hospitals of Hannover and Magdeburg.

Dr. Klein is considered one of the pioneers in the field of cardiac defibrillation therapy. His main research area is clinical electrophysiology, including non-pharmacological therapy of arrhythmias and risk stratification for sudden cardiac death. He was an investigator in the MADIT II trial and has published nearly 300 original scientific papers and book chapters. He is an editorial board member of several scientific journals, and serves as senior editor of *Herzschrittmachertherapie und Electrophysiologie*.



"It is an honor for us to raise funds to establish a permanent legacy for Art Moss and Helmut Klein whose innovations have saved hundreds of thousands of lives around the world. Please join us."

— CHARLES J. LOWENSTEIN, M.D., CHIEF OF CARDIOLOGY AND
DIRECTOR OF THE AAB CARDIOVASCULAR RESEARCH INSTITUTE,
UNIVERSITY OF ROCHESTER SCHOOL OF MEDICINE AND DENTISTRY

To contribute to the Moss-Klein Professorship, please call
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