Honored Speaker
Donald M. Bers, Ph.D.

“Ca and CaMKII signaling in normal and failing hearts”
Dr. Bers is the Joseph Silva Chair for Cardiovascular Research, Distinguished Professor and Chair of the Department of Pharmacology at the University of California, Davis School of Medicine. He received his doctorate in Physiology from UCLA in 1978. He did a postdoc at the University of Edinburgh, then returned to UCLA and UC Riverside where he rose to Professor. He was Chair of Physiology at Loyola University Chicago from 1992-2008 before moving to UC Davis. He sits on the editorial boards of: *Circulation Research, Journal of Molecular and Cellular Cardiology* (as Assoc Ed) and *Cell Calcium*. He has served in leadership roles in the AHA, Biophysical Society, American Physiology Society, Heart Failure Society of America and International Society for Heart Research (now President of NA Section), as well as on grant review panels at NIH and AHA. He is a Fellow of the AHA, ISHR and Biophysical Society. He is the Principal Investigator of an NIH Program Project Grant and MERIT award, author of more than 250 research articles, and a definitive and renowned single-author book *Excitation-Contraction Coupling And Cardiac Contractile Force*. Dr. Bers has also mentored dozens of Ph.D. students and postdoctoral fellows.

Dr. Bers’ research focus is on Ca$^{2+}$ regulation in cardiac myocytes as a nodal control point in cardiac electrical activity, excitation-contraction coupling, energetics and, recently, excitation-transcription coupling. Work in his lab has focused on the fundamental aspects of numerous ion channels and transporters involved in cardiac function, and on how these interact dynamically in the myocyte environment to regulate cardiac electrophysiology and contractility, by combining quantitative biophysical, molecular and cellular approaches. His comprehensive and rigorous work has formed the foundation of our modern understanding of the detailed contribution and regulation in intact cardiac myocytes of Ca current, Na/Ca exchange, SR Ca uptake and release, mitochondrial Ca uptake and Na/K-ATPase. His integrative perspective on quantitative aspects of how cardiac myocytes work is widely appreciated.

His group also studies what goes wrong with these systems in the setting of heart failure, and how that contributes to contractile dysfunction and arrhythmogenesis in heart failure, work that helps to identify potential targets for therapeutic intervention. His group also develops computer models to synthesize the combined function of many cellular channels, transporters and their regulation. These serve as educational tools, help predict the behavior of this complex system and aid in sharpening new experimental hypotheses to enrich our understanding of cardiac function. Dr. Bers has also actively collaborated in research with many other groups, and has contributed to the synergistic progress of cardiac research.

Howard Rockman, M.D.
Cincinnati, OH: 2008
“G protein-coupled receptor signaling and heart disease”

Joanne S. Ingwall, Ph.D.
Bologna, Italy: 2007
“Energetics of the Failing Heart: new tools yield new insights”

Evangelia Kranias, Ph.D.
Toronto, Canada: 2006
“The Orchestra of SR Calcium Players: Who is the Conductor?”

Edward D. Frohlich, M.D.
New Orleans, LA: 2005
“Left Ventricular Hypertrophy: An Adaptive Cardiac Response with Multifactorial Risks”

David Kass, M.D.
Brisbane, Australia: 2004
“Cardiac Dysynchrony and Resynchronization: From Bench to Bedside”

Piero Anversa, M.D.
Mystic, Connecticut: 2003
“Myocardial Regeneration in Heart Failure”

This award is funded by generous contributions from Bristol Myers Squibb, Hoffman-LaRoche, AstraZeneca, Scios and the Michael and Keri Whalen Foundation.