

KEITH REIMER, M.D.

1946-2002

Keith Arnold Reimer, M.D., Ph.D., Professor of Pathology at Duke University Medical School, internationally recognized cardiovascular scientist, pathologist, and teacher, died on March 15, 2002 of metastatic renal cell carcinoma at the age of 56. Keith began his career in experimental pathology studying ischemic injury of the kidney, however he quickly shifted his focus to myocardial ischemic injury, the field in which he went on to make his major scientific contributions. After completing the MD/PhD program at Northwestern University in Chicago, Keith joined the faculty at Duke University in 1975 as Assistant Professor of Pathology. Early in his career, working in collaboration with Dr. Robert B. Jennings, he published landmark studies describing and characterizing the "wavefront phenomenon" of myocardial ischemic cell death. These studies, published in two papers (*Circulation* 56: 786-794, 1977; and *Laboratory Investigation* 40: 633-644, 1979), have been cited more than 1000 times. During the early 1980s, Keith developed methods to measure baseline predictors of infarct size, such as area at risk and collateral flow, that have become the standard for generating reliable and reproducible data to test cardioprotective interventions. The effort to discover cardioprotective interventions led to one of Keith's most notable achievements – the description of one of the strongest and most reproducible interventions for reducing infarct size: ischemic preconditioning. Numerous investigators and laboratories have worked to better understand this remarkably effective intervention, and the ever-expanding number of studies on ischemic preconditioning, in a wide variety of tissues, have consistently confirmed the original observation that brief periods of ischemia and reperfusion are not detrimental, but are actually markedly protective. The original article describing the phenomenon of ischemic preconditioning, "Preconditioning with ischemia: a delay of lethal cell injury in ischemic myocardium" (*Circulation* 74: 1124-1136, 1986) has been cited more than 1700 times.

Keith was an active member of the ISHR since 1976, and was elected a Councilor of the American Section in 1979, serving until 1985. He was a finalist for the Richard Bing Young Investigator Award of the ISHR in 1980. Keith served as Secretary of the American Section from 1985-1994, and as a member of the Council of the International Society from 1989-1995. In 1997, he became President-Elect of the American Section and was the sitting President of the American Section, as well as a member of the International ISHR Council, when he died.

About the Award...

Each year, the International Council selects a speaker to deliver the Keith Reimer Distinguished Lecture at the World Congress or speaker's section meeting. The purpose of this lecture is to honor the memory of Dr. Reimer and to recognize his contributions to cardiovascular research. The topic of the lecture must be in the field of ischemia, coronary hemodynamics, cardiac metabolism, or contractile mechanisms. The speaker receives a plaque and \$1,000 honorarium in addition to travel expenses.

*This award is funded by a generous contribution from
Chugai-Pharmaceutical Co.*



ISHR

International Society for Heart Research

Honorary Life President

RJ Bing, *USA*

President

R Ferrari, *Italy*

President Elect

R Bolli, *USA*

Past President

J Downey, *USA*

Secretary General

M Avkiran, *UK*

Treasurer

E Murphy, *USA*

Journal Editor

RA Walsh, *USA*

Bulletin Editors

TJC Ruigrok, *The Netherlands*

L Anderson Lobaugh, *USA*

Council 2004-2007

M Avkiran, *UK*

D Bers, *USA*

R Bolli, *USA*

L Delbridge, *Australia*

F Di Lisa, *Italy*

S Dimmeler, *Germany*

J Downey, *USA*

D Eisner, *UK*

R Ferrari, *Italy*

NK Ganguly, *India*

G Hasenfuss, *Germany*

G Heusch, *Germany*

T Hintze, *USA*

M Hiraoka, *Japan*

M Hori, *Japan*

I Komuro, *Japan*

E Marban, *USA*

R Moss, *USA*

E Murphy, *USA*

R Nagai, *Japan*

E Olson, *USA*

S Pepe, *Australia*

P Tucci, *Italy*

T Ruigrok, *The Netherlands*

R Walsh, *USA*

W Weglicki, *USA*

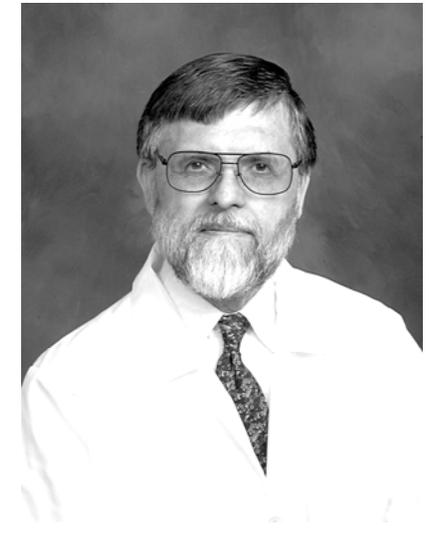
R-P Xiao, *China*



ISHR

International Society for Heart Research

THE KEITH REIMER DISTINGUISHED LECTURE 2007



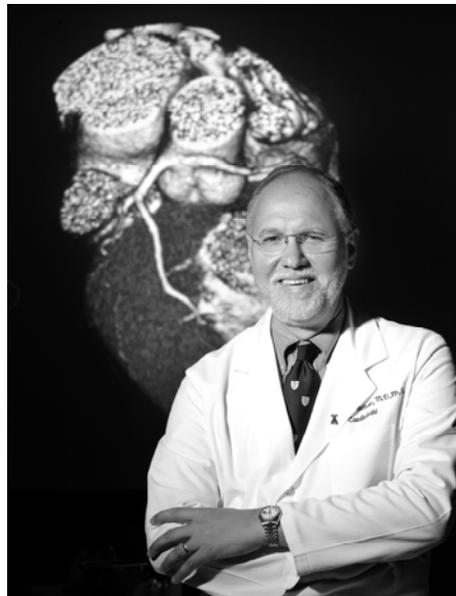
Honored Speaker

Dr. Eduardo Marban

"Stem Cells for

Cardiac Regeneration"

2007 HONORED SPEAKER
EDUARDO MARBAN, M.D., PH.D. BOLOGNA, ITALY



A native of Havana, Cuba, Dr. Marbán came to the USA with his parents at the age of six as a political refugee. He earned his B.S. in mathematics from Wilkes College in Pennsylvania, and then attended the Yale University School of Medicine in a combined M.D./Ph.D. program. Dr. Marbán was an intern and medical resident on the Osler service at the Johns Hopkins Hospital, and completed his cardiology fellowship there. Appointed to the Johns Hopkins University faculty as Assistant Professor in the Department of Medicine in 1985, Dr. Marbán reached the rank of Professor in 1991. In 1998, Dr. Marbán became director of the newly-established Johns Hopkins Institute of Molecular Cardiology, an inter-departmental program designed to foster fundamental research into the workings of the heart. In 1998, Dr. Marbán was honored as the first faculty member to be named to the Michel

Mirowski, M.D. Professorship in Cardiology. This endowed chair honors Dr. Mirowski, the inventor of the automatic implantable defibrillator. In 2003, Dr. Marbán became the Chief of Cardiology at Johns Hopkins; he also inaugurated the Donald W. Reynolds Cardiovascular Clinical Research Center at Johns Hopkins, a \$24 million 4-year program focused on identifying novel risk factors for sudden cardiac death. Dr. Marbán also directs an NIH-sponsored translational research program in stem cells, the Specialized Center for Cell-based Therapy.

Dr. Marbán's professional career is dedicated to understanding disorders of cardiac rhythm and pump function, and to developing novel treatments based upon fundamental insights into mechanism. He has made fundamental contributions in several areas, including excitation-contraction coupling, the disorder of ionic homeostasis that underlie ventricular arrhythmias, and the molecular basis of myocardial ischemia/reperfusion injury. In a series of classic studies, he showed that myocardial "stunning" in rodents is caused by the loss of contractile protein sensitivity to activator calcium, secondary to modifications induced by reactive oxygen species. He also elucidated a critical role of KATP mitochondrial channels in preconditioning and their response to adenosine and nitric oxide. In the course of his research, Dr. Marbán has made several discoveries that have translated into patents (nine issued, twelve pending). These are in the fields of gene therapy, particularly for the treatment of cardiac arrhythmias, stem cells and drug treatments for heart dis-

ease and stroke. Dr. Marbán's inventions have formed the basis for three startup companies (Paralex, subsequently acquired by Cardiome Pharma, Excigen and Capricor).

Dr. Marbán has received numerous awards, including the Basic Research Prize of the American Heart Association (AHA), the Lucian Award, the Research Achievement Award of the International Society for Heart Research, the Distinguished Service Award of the Council on Basic Cardiovascular Sciences (BCVS) of the AHA, a SCOR award and a Center on Proteomics Award from the NIH, and the Reynolds Center Award of the AHA. He serves as Chair of the CVA Study Section of the NIH, Chair of the Council on BCVS of the AHA, Chief of Cardiology at Hopkins, and Editor-in-Chief of *Circulation Research*, one of the world's leading journals of cardiovascular investigation.

Previous Award Winners...

Garrett Gross, PhD
(Toronto, Canada: 2006)

Masao Endoh, MD, PhD
(Osaka, Japan: 2005)

R. John Solaro, PhD
(Brisbane, Australia: 2004)

Gerd Heusch, MD, PhD
(Strasbourg, France: 2003)

Roberto Bolli, MD
(Madison, Wisconsin: 2002)