

Janice M. Pfeffer, Ph.D.

1943-2001

The Janice M. Pfeffer Lectureship recognizes the scientific contributions of one of the pioneers in the field of cardiac remodeling. Born in Rockford, Illinois on October 31, 1943, Janice Marie Sikorski graduated with honors from Rockford College. There she studied with a lab partner named Marc Pfeffer, who shared her passion for integrative physiology. Janice and Marc became inseparable not only as husband and wife, but also as collaborators in integrative physiology. Janice M. Pfeffer was awarded her Ph.D. in Physiology and Biophysics from the University of Oklahoma, where she studied under Dr. Edward D. Frohlich. Her doctoral thesis, "Longitudinal Changes in Cardiac Function and Geometry During the Development of Left Ventricular Hypertrophy in the Spontaneously Hypertensive Rat," became a classic study on the role of cardiac hypertrophy and left ventricular remodeling. She continued her studies as a post-doctoral fellow in Dr. Eugene Braunwald's laboratory at the Peter Bent Brigham Hospital, Harvard Medical School. There she demonstrated that progressive ventricular enlargement, "ventricular remodeling", occurs following a myocardial infarction, and that this process continues long after the histologic resolution within the infarct zone. Her landmark study, "Influence of Chronic Captopril Therapy on the Infarcted Left Ventricle of the Rat", definitively demonstrated that ventricular enlargement was attenuated by angiotensin converting enzyme inhibitors, and that favorable alterations in ventricular remodeling in the animal model were associated with improved cardiac performance and prolonged survival. These pioneering animal studies introduced the concept of ventricular remodeling as a potential therapeutic target, and subsequently served as the basis for the landmark clinical trial, Survival and Ventricular Enlargement (SAVE), which showed that long-term treatment with an angiotensin converting enzyme inhibitor (captopril) prevented cardiac remodeling and resulted in improved clinical outcomes in humans. Based upon the results of this seminal translational study, angiotensin converting enzyme inhibitors have become one of the mainstays of therapy for the treatment of myocardial infarction.

In addition to being a meticulous and thoughtful scientist, Janice M. Pfeffer was a devoted mother and wife, who serves as a role model for countless women scientists. The intent of the Janice M. Pfeffer Lectureship is to acknowledge not only the latest insights and advances in the field of cardiac remodeling, but also to remember the remarkable personal and professional qualities that were emblematic of Dr. Janice M. Pfeffer.

About the Award...

Each year, the International Council selects a speaker to deliver the Pfeffer Distinguished Lecture at the World Congress or American Section meeting. The purpose of this lecture is to honor the memory of Dr. Pfeffer and to recognize her contributions to cardiovascular research. The topic of the lecture must be in the field of remodeling, heart failure and/or hypertrophy. The speaker receives a plaque and \$1,000. honorarium in addition to travel expenses.



ISHR

International Society for Heart Research

Honorary Life President

RJ Bing, *USA*

President

R Ferrari, *Italy*

President Elect

R Bolli, *USA*

Past President

JM Downey, *USA*

Secretary General and Treasurer

M Avkiran, *UK*

Journal Editor

RA Walsh, *USA*

Bulletin Editors

T Ruigrok, *The Netherlands*

L Anderson Lobaugh, *USA*

Council 2004-2007

P Anversa, *USA*

M Avkiran, *UK*

R Bolli, *USA*

L Delbridge, *Australia*

F Di Lisa, *Italy*

S Dimmeler, *Germany*

JM 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*

T Ruigrok, *The Netherlands*

P Tucci, *Brazil*

R Walsh, *USA*

W Weglicki, *USA*

R-P Xiao, *China*



ISHR

International Society for Heart Research

The Janice Pfeffer Distinguished Lecture 2006



Honored Speaker

Evangelia Kranias, Ph.D.

**"THE ORCHESTRA OF SR
CALCIUM PLAYERS:
Who is the Conductor?"**



Dr. Evangelia (Litsa) Kranias was born in Thessaloniki, Greece. She came to the United States as a Fullbright scholar to attend College at the University of Chicago. Subsequently, she received her M.S. and

Ph.D. degrees from Northwestern University in Evanston and was a postdoctoral fellow at Northwestern University Medical School in Chicago. Dr. Kranias started her faculty career at the University of Cincinnati, College of Medicine, where she is currently a Distinguished University Research Professor, Professor of Pharmacology and Cell Biophysics, and Director of Cardiovascular Biology.

Dr. Kranias leads an internationally recognized program in Cardiovascular Biology, which has provided fundamental insights into the regulation of calcium cycling in the normal and failing heart. The overall goal of Dr. Kranias' research program is to elucidate the regulatory mechanisms and signaling pathways underlying calcium homeostasis in cardiac physiology and pathophysiology with special emphasis in heart failure. She provided the first evidence on the key role of phospholamban in the regulation of cardiac contractility and showed that by

controlling the levels of phospholamban alone, it is possible to fine-tune the heart's pumping action. This key discovery opened a new front in the design of therapeutic treatments for heart failure. Dr. Kranias has also extended her basic research findings to the clinical arena and has elucidated the functional significance of the key Ca-handling proteins in the deteriorated function of human failing hearts. Furthermore, she has identified genetic variations in these key Ca-cycling proteins, which may act as modifiers of the clinical time course of heart failure. Dr. Kranias' goal is to build a comprehensive understanding of cardiac calcium cycling and contractility in health and disease.

Dr. Kranias has published over 170 original articles and 60 book chapters/review articles and has participated in numerous national and international conferences. Dr. Kranias has received many awards and honors and has served on several editorial boards and review committees. She has been a dedicated mentor for young scientists and she represents an important role model for young women in science. Dr. Kranias has been elected as a Council Member to several societies and as a Founding Fellow of the International Society of Heart Research (FISHR). She also serves as consultant researcher of Molecular Biology at the Academy of Athens Foundation of Biomedical Research, Greece, consultant researcher of the Cardiovascular Research Center, University of La Plata Medical School, Argentina, and adjunct Professor at Kwangju Institute of Science & Technology, Korea.

Previous Award Winners...

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.