## 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 at the annual section meeting of one of the three largest ISHR Sections. 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.



**International Society for Heart Research** 

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**International Society for Heart Research** 

# The Janice Pfeffer Distinguished Lecture 2019



Janice M. Pfeffer, Ph.D. 1943-2001

Honored Speaker:

#### Lucie Carrier, PhD

"Sarcomeropathy - from bedside to bench and back"

#### 2019 Honored Speaker

### Lucie Carrier, PhD

Beijing, China



Lucie Carrier received her PhD in 1989 at Grenoble University and her Habilitation (HDR) in 2000 at Paris 6 University. She has been Director of Research CNRS from 2002 to 2011 in Inserm units successively directed by Ketty Schwartz and Pascale Guicheney

in Paris. She is Professor of "Functional Genomics of Cardiomyopathies" since 2011 in the Institute of Experimental Pharmacology and Toxicology, Cardiovascular Research Center at the University Medical Center Hamburg-Eppendorf, Hamburg, Germany. She is principal investigator of the German Centre of Cardiovascular Research (DZHK), Partner site Hamburg/Kiel/Lübeck since 2011. She is the President of the European Section of the International Society for Heart Research since 2018.

She is best known for her work on the genetics and pathophysiology of hypertrophic cardiomyopathy, including the

identification of the CMH4 locus and the first mutation in MYBPC3, encoding the sarcomere component cardiac myosin-binding protein C, and the contribution of the ubiquitin-proteasome system and autophagy-lysosomal pathway in HCM. Her recent research interests are disease modelling in patient-specific and genecorrected induced-pluripotent stem cell-derived cardiomyocytes and MYBPC3 gene therapy (by exon skipping, transsplicing, gene replacement) in mouse and large animal models for severe forms of pediatric cardiomyopathy.

Lucie Carrier has published 144 peerreviewed papers and has a web-ofscience H-index of 46. She has delivered over 150 invited international and national lectures. She received the Bronze Medal of the CNRS in 1997, the Coraboeuf Prize of the French Society of Cardiology in 2002 and the Silver Medal of the ESC Ketty Schwartz Lecture on Basic Science in 2009. She is a fellow of the International Society for Heart Research and the European Society of Cardiology since 2012. She has served on the Editorial Boards of Journal of Molecular and Cellular Cardiology, Cardiovascular Research and Basic Research in Cardiology. She has supervised 50 students (11 PhD, 15 MD, 2 Bachelor,

10 Master) and 15 postdoctoral scientists. Her current team is composed of 4 PhD researchers, 1 PhD student, 3 Master students, 1 medical student and 2 technicians.

#### Previous Award Winners...

2018: Ajay Shah, MD, FMedSci
2017: Tetsuji Miura, MD, PhD
2016: Edward Lakatta, MD
2015: Kinya Otsu, MD, PhD
2014: Joan Heller Brown, PhD
2013: Michael Marber, MBBS, PhD, FRCP
2012 Daria Mochly-Rosen, PhD
2011: Thomas Force, MD
2010: Junichi Sadoshima, MD, PhD
2009: Donald M. Bers, PhD
2009: Donald M. Bers, PhD
2008: Howard Rockman, MD
2007: Joanne S. Ingwall, PhD
2006: Evangelia Kranias, PhD
2005: Edward D. Frohlich, MD
2004: David Kass, MD

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2003: Piero Anversa, MD