

Peter Harris, M.D., Ph.D. 1923 - 2002

Peter Harris was an influential international statesman in cardiology. A science scholar at King's College, London, UK, Harris trained in medicine at Kings College Hosp., qualifying in 1946. During house appointments at King's and the Brompton Hosp., he obtained his MD in 1951, winning the university gold medal and a PhD in 1955. He was appointed lecturer, in 1957, and reader in medicine, in 1962, at Birmingham University. In 1966, he was appointed the first Simon Marks' Professor of Cardiology at the Cardiothoracic Institute and Director of the Institute of Cardiology, in the Univ. of London.

His career, which was dedicated to exploring the cardiovascular system and the origins of heart disease, can be viewed as three chapters. During the 1950's and early 1960's, he was in the mainstream of research, and used established methods of haemodynamic measurements to explore cardiac output and pulmonary blood flow and the metabolism of the heart muscle. [During]...the second stage of his career ...his research into the heart muscle turned to experiments at the cellular and molecular level. In 1970, Harris organized a meeting of ...an international study group for research in cardiac metabolism, which resulted in the publication of one of the most influential works on cardiology: *Calcium and the Heart*. The third element to Harris's career involved his fascination with the evolution of the cardiovascular and related systems. In a series of essays in 1983, he traced the way that the origins of clinical heart failure might lie in ancient reflexes. His study of the right ventricle of the heart and the blood flow to the lungs of yaks showed they had adapted genetically to high altitude by eliminating the vasoconstrictor response due to reduction of oxygen.

Away from the laboratory, he was a talented musician and artist, and he showed a leaning toward satirical writing. His wife Francesca survives him.

Excerpted from The Lancet 2003: 361: 1231.

About the Award...

Created in 1986, this very distinguished Award of international importance is the highlight of each World Congress of the ISHR. It is conferred in recognition of a lifetime of distinguished scientific achievements in the field of cardiovascular research.



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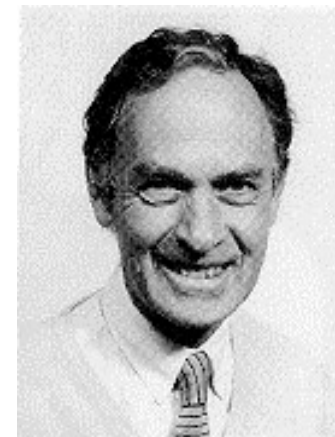
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ISHR

International Society for Heart Research

The Peter Harris Distinguished Scientist Award 2016



Peter Harris, M.D., Ph.D.
1923-2002

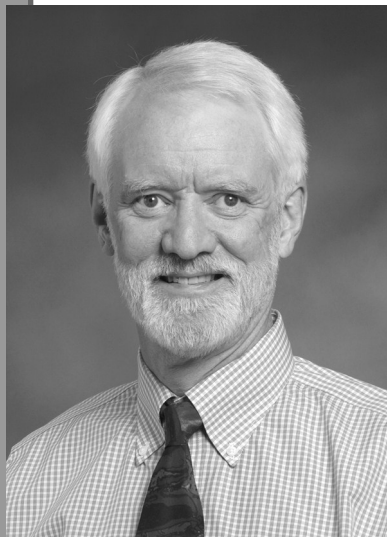
Award Winner

Donald M Bers, PhD

“Calmodulin and CaMKII in
Heart Failure and Arrhythmias”

Donald M Bers, PhD

2016 Award Winner Buenos Aires, Argentina



Dr. Bers was born in New York City, obtained his BA at the University of Colorado, Boulder and his Ph.D. in Physiology at UCLA in 1978. He did a postdoc at the University of Edinburgh, Scotland and then returned to UCLA and UC Riverside where he rose to Professor and Associate Dean of Biomedical Sciences. He was recruited to Loyola University Chicago

(1992-2008) as Chair of Physiology, and DePauw Endowed Chair in Cardiovascular Research, where he rebuilt a strong collaborative research program. In 2008 he went to the University of California, Davis where he is the Joseph Silva Chair for Cardiovascular Research, Distinguished Professor and Chair of the Department of Pharmacology. Again at Davis he has rebuilt that department as a highly collaborative and diverse research faculty, with particular strength in cardiovascular sciences.

Dr. Bers' research focus is on many aspects of Ca^{2+} , Na^+ and ion channels in cardiac myocytes as nodal control points in cardiac electrical activity, excitation-contraction coupling, myofilament activation, mitochondrial Ca/energetics, calmodulin, CaMKII and GPCR signaling, and excitation-transcription coupling. This has always been with an eye toward both integrative aspects of cardiac function/ clinical relevance, drilling down to more fundamental quantitative mechanistic understanding. Dr. Bers has combined quantitative biophysical, molecular

and cellular approaches to develop a comprehensive and rigorous framework that constitutes our modern understanding of the detailed Ca signaling, e.g. the contribution and regulation of Ca current, Na/Ca exchange, SR Ca uptake and release, mitochondrial Ca uptake and Na/K-ATPase in intact cardiac myocytes. His group has developed detailed computational models of cellular ion transport and electrophysiology. These models 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.

His group has also studied what goes wrong with these systems in the setting of heart failure and arrhythmias, and how these processes and their interactions contribute to contractile dysfunction and arrhythmogenesis in heart failure. This work has helped to identify potential targets for therapeutic intervention. Dr. Bers has also actively collaborated with many other research groups locally, nationally and internationally, and has contributed to the synergistic progress of cardiac research. He has also mentored over 100 Ph.D. students, postdoctoral fellows and junior faculty members. He has also led academic departments and large multi-institutional research teams.

Dr. Bers has authored more than 440 research articles, mostly in top notch journals many that have been impactful (*h-index* 103; >37,000 citations) and he wrote a definitive and renowned single-author book Excitation-Contraction Coupling and Cardiac Contractile Force. He is the Principal Investigator of an NIH Program Project Grant and NIH MERIT award, an NIH T32 Training Grant and has maintained continuous and solid NIH grant-funding for 35 years. Dr. Bers was elected a Founding Fellow of the ISHR, AHA and a Fellow of the Biophysical Society and AAAS. His other awards and recognitions, include the Thomas W. Smith Memorial Lecture (AHA), the Janice Pfeffer Distinguished

Lecture Award (ISHR), Distinguished Achievement Award (AHA-BCVS), NIH Study Section Chair, Distinguished Scientist Award (AHA), Debrecen international Award for Molecular Medicine, Burdon Sanderson Lectureship (Oxford University). He has given ~300 invited research seminars and presentations at universities and national/ international scientific meetings.

Dr. Bers has been active in professional service. He currently serves in Associate Editorial roles for *Circulation Research*, *Journal of Molecular and Cellular Cardiology* and *Journal of Physiology*. He has served in numerous leadership roles for the AHA, Biophysical Society, American Physiology Society, Heart Failure Society of America and International Society for Heart Research (former President of NA section), Association of Chairs of Departments of Physiology, Gordon Research Conferences as well as on grant review panels at NIH and AHA. He has also organized numerous scientific conferences, including for the ISHR and Gordon Research Conferences.

Past Award Winners

Roberto Bolli, USA, 2015
Jonathan Lederer, USA, 2015
Evangelia Kranias, USA, 2014
Masatsugu Hori, Japan, 2013
James M. Downey, USA, 2010
David J. Hearse, UK, 2007
Arnold M. Katz, USA, 2004
Robert J. Lefkowitz, USA, 2001
Lionel H. Opie, South Africa, 1998
Howard E. Morgan, USA, 1995
Robert B. Jennings, USA, 1992
Albrecht Fleckenstein, Germ, 1989
Setsuro Ebashi, Japan, 1986