



Division for Cardiovascular Pharmacology

Paul M. Vanhoutte Distinguished Lectureship Award

2008 Recipient



Donald D. Heistad, M.D.

Paul M. Vanhoutte Distinguished Lectureship Award

This Award was established by the American Society for Pharmacology and Experimental Therapeutics (ASPET) and the Division for Cardiovascular Pharmacology (CVP) to honor Dr. Vanhoutte's lifelong contribution to the field of endothelial and vascular biology and pharmacology. This is a biennial award, consisting of a cash honorarium, a custom-designed crystal bowl depicting the named Lectureship, and travel expenses including registration to the annual spring ASPET meeting to deliver a state-of-the-art Lecture on recent advances in vascular physiology and pharmacology. There are no restrictions on institutional affiliation, nationality, or age of the candidate, but the recipient must be a member of ASPET. The Award Committee of the CVP Division makes the final selection of the recipient.

Dr. Paul M. Vanhoutte obtained his degrees at the University of Ghent (B.S., M.S., M.D.) and the University of Antwerp (Ph.D.), Belgium. He received his postdoctoral training at the University of Ghent and at the Mayo Clinic. His academic career started at the University of Ghent, followed by the Mayo Clinic and the University of Antwerp where he rose to the rank of Full Professor and Head of the Department of Pharmacology (1973-1981). He was Professor of Physiology and Pharmacology at the Mayo Clinic from 1981 to 1989. From 1989 to 1995, he was the Director of the Center for Experimental Therapeutics at the Baylor College of Medicine and, from 1995 to 2002, Dr. Vanhoutte was Vice-President R&D, and Director of Discovery Research at the Institut de Recherches Internationales Servier, in Courbevoie (Paris, France). During his tenure as Director of Discovery Research at Servier, he supervised the discovery and preclinical development of drugs designed for the treatment of cardiovascular diseases, diabetes, obesity, central nervous system disorders, cancer and osteoarthritis. He is currently the Head of the Department of Pharmacology, and the Director of the BioPharmaceutical Development Center, at the University of Hong Kong.

Dr. Vanhoutte holds many Honorary and Visiting Professorial titles at various Universities worldwide and is the founder, past-President and member of the Serotonin Club and the Asian Society for Vascular Biology. He chaired the International Union of Basic and Clinical Pharmacology (IUPHAR) Committee for Receptor Nomenclature from 1989 to 1998. He was Secretary General of the IUPHAR from 1998 to 2002, and President of the Union from 2002 to 2006. He serves on many journal editorial boards and was the Editor-in-Chief of the Journal of Cardiovascular Pharmacology from 1989 to 2007. Dr. Vanhoutte has also received the Doctor Honoris Causa degree from the University of Ghent in 2001, from the Universities of Antwerp, Montreal and Zurich in 2003, from the Royal Melbourne Institute of Technology in 2005, and from the Universite Louis Pasteur in Strasbourg in 2006.

Dr. Vanhoutte has written three theses and co-authored or edited 35 books. He has published 535 original research papers, and 495 editorials, reviews or chapters in books. Dr. Vanhoutte's major scientific contribution has been to appreciate and analyze the importance of endothelial cells in the control of the underlying vascular smooth muscle in health and disease, and to highlight the complexity of that regulation. More importantly, Dr. Vanhoutte has trained and mentored numerous graduate students and post-doctoral fellows and many of them have established highly successful careers in both academia and industry. Dr. Vanhoutte exemplifies all the definitions of a role model and is a living legend for the fields of vascular biology and pharmacology.

Recipient of 2008 Paul M. Vanhoutte Distinguished Lectureship Award

Dr. Donald D. Heistad is the recipient of the inaugural Paul M. Vanhoutte Distinguished Lectureship award in Vascular Pharmacology. The title of his lecture is: Endothelial Function in the Time of the Giants. Dr. Heistad received his undergraduate training at the University of Illinois and his medical training at the University of Chicago and has been on the faculty of the Departments of Medicine and Pharmacology at the University of Iowa College of Medicine since 1970. He rose to the rank of Professor of Medicine in 1976 and to Professor of Pharmacology in 1987. Since 1994 he has been the Deputy Director of the world renowned University of Iowa Cardiovascular Research Center. In addition, he served as the Director of the Cardiovascular Division from 1995 to 2003. Dr. Heistad also holds the titles of the University of Iowa Foundation Distinguished Professor and the R.T. Zahn Professor of Cardiology.

Dr. Heistad is widely recognized as an international leader in the study of cerebral circulation. He has made important contributions to understanding the role of neural factors in the regulation of cerebral circulation. He demonstrated that sympathetic nerves protect cerebral vessels and the blood-brain barrier against acute and chronic hypertension, and against stroke during hypertension. He has also helped elucidate the role of the endothelium in the cerebral vasculature and has contributed significantly to our understanding of the vascular impact of occlusive and hemorrhagic stroke. Dr. Heistad has recently developed the first model of spontaneous intracranial hemorrhage (ICH) in hypertensive mice. He has also performed a series of studies of vasomotor consequences of atherosclerosis and regression in primates. For example, in atherosclerotic vessels, he demonstrated that an imbalance between nitric oxide and superoxide contributes to vascular dysfunction. He also showed that platelets and leukocytes interact abnormally to produce vasospasm in atherosclerotic vessels. Finally, Dr. Heistad was among the first to apply the technique of gene transfer to the study of vascular pathophysiology.

Dr. Heistad has maintained an active and continuously funded research program at the University of Iowa. His current studies are supported by two major NIH grants and a VA MERIT award. Dr. Heistad has published over 380 research papers, reviews and book chapters on the regulation of the cerebral circulation, the vascular impact of atherosclerosis and the application of gene transfer in the study of vascular pathophysiology. As a result of his many research accomplishments, Dr. Heistad was awarded the 2001 Research Achievement Award from the American Heart Association as well as its Novartis Award for Hypertension Research (1997), the Scientific Councils' Distinguished Achievement Award (2002) and the George Duff Memorial Lectureship (2005). Dr. Heistad also received the Wiggers Award from the American Physiological Society (1999) and the Landis Award from the Microcirculatory Society (2001). Dr. Heistad has recently completed an eight-year term as Editor-in-Chief of Arteriosclerosis, Thrombosis, and Vascular Biology (ATVB). During his editorship, ATVB became a leading journal in vascular biology and its impact factor increased from 3.9 to 6.9.

Dr. Heistad has been a mentor to a remarkable number of outstanding young scientists, especially clinician-scientists. With his colleagues in the Cardiovascular Center at the University of Iowa, Dr. Heistad has helped shape the scientific careers of many young investigators including Drs. Frank Faraci, J. Koufy Williams, Gary Baumbach, John Williams, Sanjay Kaul, Christopher Sobey and others, who have become professors and established their own independent research careers at various academic institutions.

The Cardiovascular Pharmacology Division Award Committee unanimously agreed that with his remarkable scientific achievements and outstanding mentoring of young scientists, Dr. Heistad personifies the type of individual for which the Paul M. Vanhoutte Distinguished Lectureship Award was created.

Paul M. Vanhoutte Award Endowment

An endowment has been established to ensure long-term funding of this award. The following is the current listing of those who have generously contributed to the endowment. For those who are interested in supporting this award, please contact either Margie Arkin (markin@aspet.org) or Dr. David Ku (davidku@uab.edu) for details on how to make a contribution. Any amount will be welcomed and appreciated.

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