THE FOURTH M. DARIA HAUST VISITING LECTURER

DR. PETER F. DAVIES, PhD

Dr. Davies, Robinette Foundation Professor of Cardiovascular Medicine, is Professor of Pathology and Laboratory Medicine, Professor of Bioengineering, and Director of the Institute for Medicine and Engineering (IME) at the University of Pennsylvania

"Understanding Cardiovascular Patho-susceptibility: The Influence of the Hemodynamic Environment upon Endothelial Phenotype *in vivo* and *in vitro*"

Tuesday, May 8, 2007
4:00 pm
Richardson Amphitheatre, Richardson Laboratory
Queen's University

Sponsored by
Dr. M. Daria Haust Lectureship Fund and the Department of Pathology and Molecular Medicine, Queen's University

Dr. M. Daria Haust

M. Daria Haust was born in Poland, and graduated summa cum laude from the medical school of Heidelberg University in 1951. After emigrating to Canada with her husband in 1952, she entered a rotating internship at the Kingston General Hospital. She undertook a year of atherosclerosis research with Dr. Robert More and then enrolled in the General Pathology residency program at Queen's. In 1959, she achieved specialty certification from the Royal College of Physicians and Surgeons of Canada and also obtained an MSc-degree from Queen's. Following a postdoctoral fellowship in pediatric pathology with Dr. Benjamin Landing at the Cincinnati Children's Hospital, Dr. Haust joined the Faculty at Queen's in 1960. She successfully nurtured two sons, embarked on a career in experimental atherosclerosis and pediatric pathology and, in 1967, moved to the University of Western Ontario where she remains active as Professor Emeritus.

Dr. Haust has had a distinguished career in basic research in several areas including atherosclerosis, the process of elastogenesis, and the pathogenesis of several genetic diseases. She is a highly regarded educator and has played important roles in the establishment of national and international scientific societies, serving either as President, Secretary-Treasurer or as a member of the Council. She has also served on a number of Editorial Boards of scientific journals and has been invited to lecture around the globe on countless occasions. Her scientific contributions have been honoured by a multiplicity of distinctions (e.g., the Canada Council Killam Prize in Medicine; Gold Medal Award from the International Atherosclerosis Society; Honorary membership of the Academy of Science of Heidelberg; Best Teacher Awards at the University of Western Ontario; the William Boyd Lectureship of the Canadian Association of Pathology; the Andreas Vesalius Medal by the University of Padua; Honorary Professorship of Medicine from the University of Chile, and many others). Dr. Haust's biography as one of the Founders of Pediatric Pathology appeared in 2001, and a Festschrift in her honour, with contributions from 14 international scientists, was published in a scientific journal in 2002. In 2004, she received the Distinguished Pathologist Award from the US/Canadian Academy of Pathology. Of the educational and research fellowships and awards named in her honour, that established in 2006 by the CSATVB (formerly: Canadian Atherosclerosis Society) has a special meaning for her as the annual competition for the "Daria Haust Research Award" will be "open only to female members of that Society who are in their first ten years of a faculty appointment". She is the recipient of honorary degrees in medicine from three mediaeval Universities (Jagiellonian University, Krakow; Charles University, Prague; Havana University, Havana). In 2007, Dr. Haust's extraordinary career culminated with her being named an Officer of the Order of Canada.

Through this lectureship the Department honours Daria Haust's scholarly achievements, her contributions to her profession, and her continuing passionate devotion to our Department and to Queen's University.

Dr. Peter F. Davies

Born in England, he graduated in Chemistry and Biochemistry from the University of Newcastle-upon-Tyne followed by an MSc in Biochemistry with Alex J. Wood in Animal Physiology at the University of Victoria, BC in 1972. He received his Ph.D. in Experimental Pathology (Cardiovascular) from Cambridge University in 1975. After postdoctoral training in cellular pathology at the University of Washington with Russell Ross and John Glomset, he was recruited to the faculty at Harvard Medical School during which period (1978-1988) he was also a visiting scientist at MIT involved in pioneering research into endothelial biomechanics with C. Forbes Dewey and Michael Gimbrone. Dr. Davies was recruited to the University of Chicago in 1988 as tenured Professor of Pathology and Director of the NIH Specialized Center of Research in Atherosclerosis and was also Director of the NIH training program in cardiovascular pathophysiology and biochemistry. In 1996 he was recruited to Penn as Founding Director of the interdisciplinary Institute for Medicine & Engineering, where he also directs an interdisciplinary NIH Cardiovascular Training Grant and a Howard Hughes Medical Institute-NIH Interfaces Program. In undergraduate education, he established a formal course of Clinical Preceptorships for bioengineering students to promote early translational exposure.

In 1997-99 he served as Chairman of the American Heart Association National Research Committee and was a member of the Smart Medical Systems Team of the National Space Biomedical Research Institute of NASA (2002-5) building differential gravity genomics databases for the space community. Dr. Davies is the author of >140 peer reviewed papers in cardiovascular, biomedical engineering, and basic science journals, and has trained more than 40 students and postdoctoral Fellows. He is a member of five editorial boards.

Dr. Davies has been honored in both the cardiovascular and biomechanics fields including an NIH MERIT Award, the 1997 CARIM medal of the University of Maastricht, a Year 2000 Special Recognition Award of the AHA, Distinguished Lectureships in Biomedical Engineering (Biomechanics at Stanford; Zweifach Lecturer at CCNY) and Pathology (Pritchett Endowed Lecturer at UAB), and a Senior Research Scientist Award from the AHA in 2004.

His research has consistently taken an integrative and highly interdisciplinary approach to vascular biology and pathology including innovations in cell communication, quantitative structure-function studies in living cells, and subcellular spatial mechanisms of endothelial mechanotransduction including a widely accepted model of decentralized mechano-signaling. Current research in his lab is directed at studies of *in vivo* multiscale ‘spatial’ genomics that defines endothelial phenotype as a function of regions of susceptibility to, or protection from, atherosclerosis (arteries) and calcification (heart valves).

The Department of Pathology and Molecular Medicine invites you to meet Peter Davies and celebrate the contributions of M. Daria Haust at a reception immediately following the lecture at the University Club.

Previous Haust Lecturers

2001 Kurt Benirschke, Emeritus Professor of Pathology and Reproductive Medicine, University Medical Center, San Diego, California

2003 Luc Oligny, Pediatric and Molecular Pathologist, Department of Pathology and Cellular Biology, Université de Montréal and Hôpital Sainte-Justine, Montréal, Québec

2005 Timothy Triche, Professor of Pathology and Pediatrics at the University of Southern California, and Head, Department of Pathology, Childrens Hospital Los Angeles, Los Angeles, California