

RICHARD HYNES TO RECEIVE THE 2010 EARL P. BENDITT AWARD

William R. Huckle

The NAVBO Meritorious Awards Committee and Council is pleased to announce the selection of Dr. Richard O. Hynes as the 2010 Recipient of the Earl P. Benditt Award, in recognition of his many contributions to our appreciation of the roles of cellular adhesion molecules in the formation, repair, and pathologies of the vasculature. Dr. Hynes is Daniel K. Ludwig Professor for Cancer Research and an Investigator of the Howard Hughes Medical Institute in the Department of Biology at MIT. As this year's Benditt awardee, Dr. Hynes will present the Benditt Lecture and receive the award, one of NAVBO's highest honors, at the International Vascular Biology Meeting in Los Angeles, California, in June 2010.

Dr. Hynes holds a B.A. in Biochemistry from the University of Cambridge and a Ph.D. in biology from MIT. Following post-doctoral studies at the Imperial Cancer Research Fund in England, Dr. Hynes joined the MIT faculty in the Department of Biology. He has been the recipient of numerous awards, including a Gairdner Foundation International Award, a Guggenheim Foundation Fellowship, and the E.B. Wilson Medal from the American Society for Cell Biology. Dr. Hynes was elected to the National Academy of Sciences in 1996.

For three decades, Dr. Hynes has worked to understand mechanisms of cell adhesion, the dynamic relationship between cell and surroundings that is vital for development and normal cellular physiology and, when aberrant, underlies many diseases, including cancer, inflammation, and thrombosis. Hynes's work in adhesion has led to detailed understanding of the integrins, a family of cell-surface receptors that bind to fibronectin and other extracellular matrix molecules and provide cells with key interactive links to their environment.

While his work in the integrins has broad applicability, the Hynes lab has generated and made available numerous knock-out mouse

strains directly relevant to vascular biology, including mice null for vWF, thrombospondin, alpha-V and beta-3 integrins, as well as various selectins and cadherins. These and related models have been instrumental in elucidating the role played by the fibrinogen receptor (alpha-IIb/beta-3 integrin) in platelet aggregation and thrombosis, helping to validate this complex as a target for anti-thrombotic drugs. Similarly, mutants in alpha-V, beta-3 or beta-3 integrins have been invaluable in reconciling conflicting view of the centrality of these adhesion molecules in tumor angiogenesis, again providing insight crucial for development of anti-angiogenic agents.

More recently, the Hynes lab has focused on roles played by alternatively-spliced forms of fibronectin in vascular development and morphogenesis. These studies also are highly relevant to dysregulated angiogenesis that occurs in tumors, as well as to mechanisms of metastasis. Likewise, his lab is exploring how carcinoma cells may express ligands for selectins, thereby availing themselves of a means of extravasation during metastasis.

Please join us in June at the International Vascular Biology Meeting in Los Angeles, to celebrate the important contributions Dr. Hynes has made to our field as the Earl P. Benditt Award winner. The date and time of the presentation are yet to be announced.

The Earl P. Benditt Award was initiated by NAVBO in 1999 to honor a "forefather" of vascular biology. The award recognizes an individual who has made an outstanding discovery or developed a concept that has been seminal to our understanding of vascular biology or pathology. Information concerning Earl P. Benditt can be found at <http://books.nap.edu/html/biomems/ebenditt.html>. Further information regarding the award can be found at:

<http://www.navbo.org/?BendittInfo>.