Biographical Sketch

John E. Dowling

John E. Dowling received his A.B. and Ph.D. from Harvard University. He taught in the Biology Department at Harvard from 1961 to 1964, first as an Instructor, then as Assistant Professor. In 1964 he moved to Johns Hopkins University, where he held an appointment as Associate Professor of The Wilmer Institute of Ophthalmology and Biophysics. He returned to Harvard as Professor of Biology in 1971, and is presently the Gordon and Llura Gund Research Professor of Neurosciences. He was Chairman of the Biology Department at Harvard from 1975 to 1978 and served as Associate Dean of the Faculty of Arts and Sciences from 1980 to 1984. He was Master of Leverett House, Harvard University from 1981 to 1998. He is a Fellow of the American Academy of Arts and Sciences, a member of the National Academy of Sciences and a member of the American Philosophical Society.

He received the Friedenwald Medal from the Association of Research in Ophthalmology and Vision in 1970, the Annual Award of the New England Ophthalmological Society in 1979, the Retinal Research Foundation Award for Retinal Research in 1981, an Alcon Vision Research Recognition Award in 1986, a National Eye Institute's MERIT award in 1987, the Von Sallman Prize in 1992, The Helen Keller Prize for Vision Research in 2000, the Llura Ligget Gund Award for Lifetime Achievement and Recognition of Contribution to the Foundation Fighting Blindness in 2001, the Paul Kayser International Award in Retina Research in 2008 and the Glenn A. Fry Medal in Physiological Optics in 2009. He was granted an honorary M.D. degree by the University of Lund (Sweden) in 1982, an honorary Doctor of Laws degree from Dalhousie University (Canada) in 2012, and an honorary Doctor of Science degree from the State University of New York in 2015.

His research interests have focused on the vertebrate retina as a model piece of the brain. He and his collaborators have long been interested in the functional organization of the retina, studying its synaptic organization, the electrical responses of the retinal neurons, and the mechanisms underlying neurotransmission and neuromodulation in the retina. More recently he has focused attention on zebrafish as a model system in which one can explore the development, genetics and color vision of a vertebrate retina.