

BRIEF BIOGRAPHY: Bhanu P. Jena, Ph.D.

I was born in Jajpur, a small town in Odisha, India, on November 1, 1955, to Manju and Prafulla Jena. My early childhood was spent in remote villages in Odisha, where my grandfather Braja Kishore practiced medicine. The dedication of my father and grandfather to science and medicine and their service to humanity greatly influenced me to choose a career in science. I majored in Chemistry, Zoology, and Botany, for my Undergraduate studies at BJB College in Bhubaneswar, Odisha (B.Sc., 1975) and completed a Masters Degree in Zoology (Endocrinology) from Utkal University, (M.Sc., 1978). I graduated top of my graduating class in the Masters of Science program, and received the Prasant Ku. Memorial Prize and the Utkal University Gold Medal. In December of 1988, I received Doctorate Degree (Ph.D.) in Zoology (Molecular Endocrinology), and the Research Excellence Award from Iowa State University. Following postdoctoral training as a Fellow at Yale University, I accepted a faculty appointment at Yale University as an Assistant Professor, and in 2000, moved to the Department of Physiology, at Wayne State University School of Medicine, as a tenured full Professor, and Founder-Director of the Institute of NanoBioScience. In 2004, I was conferred the title of Distinguished Professor, and the George E. Palade University Professor by the Board of Governors of Wayne State University. I am the only living University Professor, and the second at Wayne State University's 160-year history.

Since high school, my passion has been to understand the workings of the unit of life, 'the cell'. At a very early age, I was fascinated by the complexity of 'the cell' in electron micrographs, similar to the complexity of a city, yet every aspect of its function is so precisely regulated. My scientific enquiry on how cells secrete, led to the discovery of the "*porosome*" -a new cellular structure and a molecular nanomachine, demonstrated to be the universal secretory portal in cells involved in the fractional discharge of intravesicular contents during secretion. Currently, the major focus of my laboratory is to determine the distribution of proteins within the porosome complex using single particle cryoelectron microscopy, and small angle x-ray solution and neutron scattering. Additionally in the past 15 years, I have been involved in institution building to bring the benefits of science and education to society.

Among the honors and awards I have received over the years are: 2015 Distinguished Scientist Award from the Society for Experimental Biology and Medicine; Elected Foreign Member of the Georgian National Academy of Science; Fellow AAAS; the Swedelius Cancer Research Award; the Hallim Distinguished Award Lecture jointly with the Prof. Ahmed H. Zewail; Sir. Aaron Klug Award; ASAS Basic Biological Science Award; Ranbaxy Basic Research in Medical Sciences Award; Elected Foreign Member of the Korea Academy of Science & Technology; Elected Foreign Member of the National Academy of Medicine, Romania; George E. Palade Gold Medal; elected to the Academy of Scholars at Wayne State University; six Honorary Doctorates including one from Babes-Bolyai University, Romania, jointly with Prof's George E. Palade and Günter Blobel; and Distinguished Visiting Professorships in a number of academic institutions.

Throughout my career, I have been very fortunate to avail the opportunity to learn from wonderful teachers and scholars, and to work with students and colleagues with a passion for science. My family has been a great source of peace, inspiration, and joy in life.