

Dr. Bernice Grafstein received her B.A. in physiology at the University of Toronto and her Ph.D. in neurophysiology at McGill University in Montreal. As a graduate student she trained as an electrophysiologist, working on structure-function correlations in the cerebral cortex. Her thesis work was on the mechanism of cortical spreading depolarization, which has been recognized as playing an important role in migraine, stroke and other cortical pathology. Her contributions established the role of the extracellular movement of potassium ions in propagation of spreading depolarization, and her work has become a classic in its field. She subsequently became interested in nervous system development and regeneration, and is known for her work on intracellular transport of protein in normal and regenerating neurons, as well as other forms of molecular signaling among various cell types in the brain. She has been President of the Society for Neuroscience and is currently a Trustee and Vice-President of the Grass Foundation, which supports training and research in neuroscience. She now serves as Professor of Physiology & Biophysics and the Vincent & Brooke Astor Distinguished Professor in Neuroscience at Weill Cornell Medicine in New York City. She has recently been appointed a member of the American Academy of Arts and Sciences.