

Robert Edwards, MD: “The Frequency Dependence of Neurotransmitter Release”

Robert Edwards is a neuroscientist recognized for his work on the mechanisms and regulation of neurotransmitter release. He is known for identification of the proteins that transport classical transmitters into neurosecretory vesicles. He has used these transporters to elucidate the corelease of classical transmitters and the formation of dense core vesicles that release peptide hormones, neural peptides and other neuromodulators. The goal is to understand how the properties of release contribute to information processing, behavior and disease. Recent work addresses the function of the presynaptic protein α -synuclein and its role in Parkinson's disease.



Robert Edwards was born in New York City, attended Yale College and Johns Hopkins Medical School. He trained in clinical neurology, studied as a postdoctoral fellow with William J. Rutter at UCSF and joined the faculty at UCLA in 1990 before returning to UCSF in 1995 where he is the Cahill Professor of Neurology and Physiology. He is a member of the National Academy of Medicine and the National Academy of Sciences.