

## Biographical Sketch of Dr. Lubert Stryer

Dr. Stryer is Winzer Professor, Emeritus, in the School of Medicine and Professor of Neurobiology, Emeritus, at Stanford University. He received his B.S. degree in 1957 from the University of Chicago and his M.D. degree in 1961 from Harvard. He was a postdoctoral fellow at Harvard and then at the Medical Research Council Laboratory of Molecular Biology, Cambridge, England. In 1964, Dr. Stryer joined the faculty of the Department of Biochemistry at Stanford. In 1969, he moved to Yale, and in 1976, returned to Stanford to head a new department.

His research over more than four decades has dealt with the interplay of light and life. Dr. Stryer's laboratory discovered the primary stage of amplification in vision and elucidated the G-protein cascade that generates a neural signal in visual excitation. He has also contributed extensively to our understanding of calcium signaling in cells. Dr. Stryer has developed new fluorescence techniques for studying biomolecules and cells, as exemplified by fluorescence resonance energy transfer. Dr. Stryer is the author of *Biochemistry*, a textbook used widely throughout the world for more than twenty-five years.

The interface between the academic and industrial worlds has also attracted Dr. Stryer's interest and involvement. He participated in the founding and development of several innovative biotechnology companies. At Affymax and Affymetrix, he played a key role in devising novel optical techniques for generating high-density peptide and DNA arrays. He is a co-inventor of the DNA chip. Dr. Stryer maintains an active role in Affymetrix, Inc. as Chairman of its Scientific Advisory Boards. He also was a co-founder of Senomyx, Inc., a taste and olfaction company dedicated to making more healthful and pleasurable consumer products. Dr. Stryer has actively participated in national educational affairs as a trustee and advisor to foundations. He served as Chair of the National Research Council's Committee on Undergraduate Biology Education, a Director of the McKnight Neurosciences Endowment, and a member of the Medical Advisory Board of the Howard Hughes Medical Institute.

Dr. Stryer was elected to the National Academy of Sciences in 1984 and received the National Medal of Science in 2007. His other honors include the American Chemical Society Award in Biological Chemistry (1970), election to the American Academy of Arts and Sciences (1975) and the American Philosophical Society (2006), appointment as National Lecturer of the Biophysical Society (1987), Fellow of the American Association of the Advancement of Science (1991), the American Association for the Advancement of Science Newcomb-Cleveland Prize (1991), the Alcon Award in Vision Research (1992), an honorary Doctor of Science degree from the University of Chicago (1992), the Distinguished Inventors Award of the Intellectual Property Owners' Association (1993), the Molecular Bioanalytics Award of the German Society for Biochemistry and Molecular Biology (2002), the European Inventor of the Year Award (2006), the Frank Westheimer Prize of Harvard University (2006), and the Carl Branden Award of the Protein Society (2007)