

2010 Massry Prize

THE MEIRA AND SHAUL G. MASSRY FOUNDATION
KECK SCHOOL OF MEDICINE OF USC

Faculty, staff and students are invited to attend the

2010 Massry Prize Laureates' Lectures

Thursday, October 21st

12:30 - 1:30 PM

Mayer Auditorium

Keith Administration Building, 1st Floor

A reception will be held in the Hoyt Gallery at Noon



James Rothman, Ph.D.

Yale University

“Mechanism and Regulation of Membrane Fusion”

Intracellular membrane fusion is catalyzed by the zippering of SNARE proteins into helical bundles (termed trans-SNARE complexes, or SNAREpins) between membranes, forcing their bilayers together. In regulated exocytosis (such as synaptic transmission and hormone release) fusion does not occur until a signal like calcium ion appears. Recent studies shed light on the biophysics of fusion, how it is regulated for precise release of neurotransmitters and hormones, and how it is perturbed in chronic disease states like diabetes.



Randy Schekman, Ph.D.

University of California, Berkeley

“Membrane Transport Vesicles and Human Disease”

Schekman's laboratory developed genetic and biochemical approaches to dissect the process of protein secretion in the baker's yeast, *S. cerevisiae*. The genes and proteins his lab discovered in yeast were found to organize the secretory pathway in all eukaryotes. His work laid the foundation for recombinant expression of important secretory and membrane proteins such as insulin and hepatitis surface antigen in yeast and used for treatment of diabetes and for immunization to protect against infection by hepatitis B virus. Recently, Schekman's lab has probed the molecular mechanism of defects in secretion that lead to human diseases of development such as spina bifida.

Live webcast is available at the following link:

<http://keckapps.usc.edu/esvp/webcast.php>