MBL SPECIAL LECTURE SERIES

Wednesday, June 15, 2011 • Speck Auditorium, 8:00 PM



The John G. Nicholls Endowed Lectureship in Neural Systems and Behavior

"Navigational mechanisms of migrating monarch butterflies"

STEPHEN M. REPPERT University of Massachusetts Medical School

Steven M. Reppert, MD, is the Higgins Family Professor of Neuroscience and founding Chair of the Department of Neurobiology at the University of Massachusetts Medical School. He served as head of the Laboratory of Developmental Chronobiology at the Massachusetts General Hospital from 1983 to 2001, before moving to the University of Massachusetts. His past research has defined the physiological basis of fetal circadian clocks; elucidated molecular mechanisms of action for the pineal hormone melatonin; revealed fundamental cellular processes important for circadian clock function; and advanced our knowledge of clock genes and their transcriptional and posttranslational regulation. Since 2002, the Reppert Lab has focused on the migration of the monarch butterfly, particularly on understanding the navigational mechanisms the butterflies use during their spectacular fall migration.

Dr. Reppert received his BS and MD (with Distinction) from the University of Nebraska College of Medicine. He was on the faculty at the Massachusetts General Hospital and Harvard Medical School beginning in 1979 and was promoted to Professor in 1993. Dr. Reppert was a Charles King Trust Research Fellow and an Established Investigator of the American Heart Association. He has been a recipient of the E. Mead Johnson Award for Outstanding Research Contributions and the NIH-NICHD MERIT Award. From 2002 to 2004, he served as president of the Society for Research on Biological Rhythms.



ABOUT THE JOHN G. NICHOLLS LECTURESHIP

John G. Nicholls is Professor of Neurobiology and Cognitive Neuroscience at the International School for Advanced Studies in Trieste. He was born in London in 1929 and received a medical degree from Charing Cross Hospital and a Ph.D. in physiology from the Department of Biophysics at University College London, where he did research under the direction of Sir Bernard Katz. He worked at University College London, at Oxford, Harvard, Yale and Stanford Universities and at the Biocenter in Basel, before moving to SISSA, Trieste. With Stephen Kuffler, he made experiments on neuroglial cells and wrote the first edition of "From Neuron to Brain" which is soon to appear in its fifth edition. He is a Fellow of the Royal Society, a member of the Mexican Academy of Medicine, the recipient of the Venezuelan Order of Andres Bello and of Honorary degrees from the University of Tasmania and the University of Trieste. He has

given laboratory and lecture courses in neurobiology at the Marine Biological Laboratory, Woods Hole and Cold Spring Harbor, and at universities throughout the world. His work concerns synaptic transmission and regeneration of the nervous system after injury, which he studied first in an invertebrate, the leech, and then in immature mammalian spinal cord. Since 2004 he has started to study neural mechanisms that give rise to the rhythm of respiration.

