

MBL SPECIAL LECTURE SERIES

Wednesday, July 13, 2011 at 8 PM • Speck Auditorium



*The Masakazu Konishi Endowed Lectureship
in Neural Systems & Behavior*

Neuroethology of spatial hearing and navigation

CYNTHIA F. MOSS, *University of Maryland*

Dr. Cynthia Moss is a professor in the Department of Psychology, Institute for Systems Research, and an affiliate of the Departments of Biology and Bioengineering at the University of Maryland, College Park. Dr. Moss's research program is directed at understanding sensory information processing and adaptive motor control at a systems level. Current studies in Dr. Moss's lab explore active sensing, neurobiology of sensorimotor integration and space coding, sound localization, auditory discrimination, and somatosensory signaling for flight control.

Dr. Moss received her Ph.D. in Experimental Psychology from Brown University in 1986. She was a NATO Postdoctoral Fellow at the University of Tübingen (1985-1987) and a Research Fellow at Brown University (1987-1989). Dr. Moss is associate editor of *Journal of the Acoustical Society of America*, *Express Letters*, *Animal Bioacoustics*, and the *Journal of the Association for Research in Otolaryngology*. Dr. Moss is past director of the University of Maryland interdepartmental Neuroscience and Cognitive Science Program and Co-Director of an NIMH-supported T-32 in Neuroethology and currently co-directs an NIH P-30 Core in Computers, Engineering and Signal Processing for the Center of Comparative and Evolutionary Biology of Hearing. Dr. Moss is a member of the Society for Neuroscience, the Acoustical Society of America, International Society for Neuroethology, and the Association for Research in Otolaryngology.

ABOUT THE MASAKAZU KONISHI LECTURESHIP IN NEURAL SYSTEMS & BEHAVIOR

Dr. Masakazu "Mark" Konishi is the Bing Professor of Behavioral Biology at the California Institute of Technology. He has worked extensively for three decades on the auditory systems of barn owls, which can use their acute hearing to home in on mice on the ground, even in total darkness. The research has led to an understanding of how the owl's brain manages to "compute" precise locations in two dimensions, and how the neural pathways and circuits are involved. Dr. Konishi's work has implications for better understanding the human brain and perhaps even for future interventions in certain neurological disorders. Dr. Konishi received a B.S. and M.S. from Hokkaido University, Sapporo, Japan, and a Ph.D. from the University of California, Berkeley. Following post-doctoral fellowships at the University of Tübingen and Max-Planck-Institut in Germany, Dr. Konishi was appointed an assistant professor of biology at the University of Wisconsin, Madison. He subsequently held assistant and associate professor positions at Princeton University. Dr. Konishi is a member of the National Academy of Sciences, the American Academy of Arts and Sciences, as well as numerous professional organizations. He has received many awards, including The Peter Gruber Prize in Neuroscience.

