



The Swartz Foundation

# 11<sup>TH</sup> ANNUAL SWARTZ FOUNDATION MINDBRAINLECTURE

PROBING THE MYSTERIES OF THE MIND

## HOW THE BRAIN DECIDES *Uncovering the Secrets of Cognition*

**Michael Shadlen, M.D., Ph.D.**

Howard Hughes Medical Institute  
Department of Physiology and Biophysics  
University of Washington

**Monday, March 12, 2007  
4:30 pm**

Staller Center for the Arts, Main Stage  
Stony Brook University



**T**he brain acquires information from the environment through the senses. Unlike simpler animals that react immediately to such information, or not at all, our sophisticated brains allow us to ponder and cogitate. Higher brain function has given us the capacity to interpret information to assess its significance in light of other knowledge and to decide what to do about it. Thus the process of decision making offers a window on complex mental functions. Neuroscientists are beginning to understand the brain mechanisms that underlie the formation of a decision from the evidence received through the senses. Dr. Shadlen will describe recent discoveries he has made using a combination of behavioral, electrophysiological, and computational techniques. His experiments suggest that this computational strategy may lie at the core of higher brain function. The principles of normal brain function revealed by the study of decision making expose a path to new treatments for neurological disorders affecting our most cherished cognitive abilities.

**Dr. Michael Shadlen** is Professor of Physiology and Biophysics at the University of Washington. He received his B.A. degree in biology and his M.D. degree from Brown University. He received his Ph.D. degree from the University of California, Berkeley. He completed his residency training in neurology at Stanford University Medical Center. Dr. Shadlen returned to research as a Howard Hughes postdoctoral research fellow in William Newsome's laboratory at Stanford.

**The Swartz Foundation** sponsors the Mind/Brain Lecture Series in cooperation with the University. For more information about the Foundation, please visit [www.theswartzfoundation.org](http://www.theswartzfoundation.org). To learn more about Michael Shadlen, please visit [www.stonybrook.edu/sb/mind](http://www.stonybrook.edu/sb/mind) or [www.shadlen.org](http://www.shadlen.org)



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