



2010 DLS@BCS



# Distinguished Lecturer Series

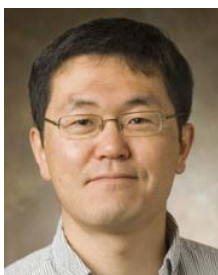
*in Brain & Cognitive Sciences*

The Department of Brain & Cognitive Sciences at Seoul National University introduces 'Distinguished Lecturer Series (DLS@BCS)', a series of public lectures by internationally-recognized researchers in Brain & Cognitive Sciences. Dr. Daeyeol Lee, Professor in the Department of Neurobiology at Yale University School of Medicine will give a lecture on Neural Basis of Decision Making in Primates.

**4:00 PM, Wednesday, August 18, 2010**  
**International Conference Hall, Bldg. 25-1**

## *Neural Basis of Decision Making in Primates*

Decision makers have to analyze the information about multiple attributes of outcomes expected from alternative options, such as the magnitude, probability, and immediacy of reward. Almost all models of decision making postulate that this information is then integrated into unified variables, often referred to as utilities. In addition, when the outcomes from alternative actions are not fully known, the animals must update their estimates of utilities or value functions. To gain insights into the circuit-level mechanisms of such computations, we analyzed the activity of individual neurons in the prefrontal cortex and basal ganglia of monkeys performing inter-temporal choice task or playing computer-simulated competitive games. The results from these experiments show that the information about multiple attributes of decision outcome is integrated in the prefrontal cortex and basal ganglia, and that the same brain areas also play an important role in monitoring the outcomes of animal's choices and using that information to improve the estimates of decision outcomes.



**Daeyeol Lee, Ph. D.**

Professor of cognition and decision making in the Department of Neurobiology at Yale University School of Medicine

Presentation is designed for scholars and students in Brain & Cognitive Sciences as well as general audiences and will be delivered in English. All lectures are free and open to the public. Therefore, reservation is not necessary. The direction to the Bldg. 25-1 (International Conference Hall) can be found at <http://useoul.edu/images/map/main.html>. For more information about DLS@BCS, visit BCS website: <http://bcs.snu.ac.kr>.

