

LEARNING AND MEMORY : EPIGENETICS AND OPTOGENETICS

ABOUT THE LECTURE

The fundamental mechanisms underlying the processes of learning and memory are still poorly understood. This talk will discuss how neuronal networks generate high level functionality by employing the well-known properties of neurons, synapses and their plasticity, which we study using optogenetic neuronal networks growing on multi-electrode arrays. In addition, data will be presented showing that Arc mediates long-term memory by mediating epigenetic changes in neuronal gene expression.

Speaker: **A/Prof Antonius Van Dongen**

*Associate Professor, Neuroscience & Behavioural Disorders
Duke-NUS Graduate Medical School*

Host: **A/Prof Wang Hongyan**

*Associate Professor, Neuroscience & Behavioural Disorders
Duke-NUS Graduate Medical School*

Date: Tuesday, 29 July 2014

Time: 12.00 PM — 1.00 PM
(Light refreshments will be served at 11.30 AM)

Venue: Duke-NUS Graduate Medical School
Amphitheatre, Level 2

Contact Person: Ms Cynthia Lim, Duke-NUS Research Affairs Department
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ABOUT THE SPEAKER

Dr. VanDongen obtained his Ph.D. in Biophysics from the University of Leiden in 1988. After receiving postdoctoral training in Baylor College of Medicine in Houston Texas, he joined the Department of Pharmacology of Duke University in 1991, where he was promoted to Associate Professor in 1998. In 2007 he moved to Singapore to join the Program in Neuroscience and Behavioral Disorders of the Duke-NUS Graduate Medical School.

