



Department of Psychology
The University of Hong Kong

香港大學心理學系

Departmental Seminar

Neuroimaging of Sleep and Sleep Disorders

4:30 p.m. – 5:30 p.m. | June 28, 2018 (Thursday)

CPD-2.42, Central Podium Level | Centennial Campus | The University of Hong Kong



Dr. Thanh DANG-VU, MD PhD

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Abstract

Brain imaging studies have provided key insights into the neural causes, consequences and correlates of sleep disorders. During normal sleep, functional neuroimaging data revealed specific changes in regional brain activity correlated with electroencephalographic sleep oscillations. Neuroimaging studies in insomnia support the global hyperarousal hypothesis, by showing decreased inhibition during the transition from wakefulness to sleep. In narcoleptic patients, both functional and structural abnormalities were found in the hypothalamus, supporting a hypocretinergic dysfunction, whereas altered limbic responses may relate to emotional dysregulation contributing to the onset of cataplectic episodes. In idiopathic hypersomnia, recent neuroimaging data suggest the presence of incomplete sleep-wake transitions in relationship with the severity of excessive daytime sleepiness. Lastly, functional and structural neuroimaging studies of rapid-eye-movement sleep behavior disorder converged on pontine abnormalities, as well as presynaptic dopamine dysfunction related to the development of synucleinopathy.

About the Speaker

Dr. Dang-Vu earned his M.D. in 2004 and Ph.D. in 2008 at University of Liège in Belgium, and completed his residency in Neurology in 2009. He completed post-doctoral fellowships at the Massachusetts General Hospital in Boston and Center for Advanced Research in Sleep Medicine in Montreal. He received research awards from the Sleep Research Society, the European Sleep Research Society and the Canadian Sleep Society. He is currently an Associate Professor at Concordia University (Montreal) and holds the University Research Chair in Sleep, Neuroimaging and Cognitive Health. He is also an attending neurologist and the Associate Director for Clinical Research at the Institut Universitaire de Gériatrie de Montréal, a Clinical Professor of Neuroscience at University of Montreal, and an Adjunct Professor of Neurology at McGill University. Dr. Dang-Vu's research program focuses on the brain mechanisms of sleep disorders using EEG and neuroimaging techniques, as well as on the relationships between sleep and cognition across the lifespan as well as in sleep and neurological disorders. He has published a total of 69 peer-reviewed articles to date, as well as 26 book chapters.

~All are Welcome~

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