

Departmental Seminar

Clinical Contributors to Cerebral White Matter Abnormalities in People Living with HIV

11:30 a.m. – 12:30 p.m. | September 1, 2017 (Friday)

Rm 813, 8/F, The Jockey Club Tower | Centennial Campus | The University of Hong Kong



Dr. Assawin Gongvatana

Abstract

HIV (human immunodeficiency virus) is a virus that damages the immune system through profound depletion of CD4+ immune cells. Without treatment, HIV infection can develop into acquired immunodeficiency syndrome (AIDS). The availability of modern treatment regimens for HIV, generally known as highly active antiretroviral therapy (HAART), has transformed HIV/AIDS from an acute fatal disease to a chronic manageable condition. While severe dementia has become relatively rare, milder forms of HIV-associated neurocognitive dysfunction continue to be prevalent. Neuropathological and in vivo neuroimaging studies in HIV+ cohorts both pre- and post-HAART have indicated preferential alterations to cerebral white matter. The etiology of this persistence of brain abnormalities in the HAART era remains unclear. This presentation will highlight a number of recent studies conducted by my colleagues and I, which attempted to better explain the mechanisms underlying HIV-associated brain dysfunction. A number of clinical markers will be discussed for their potential contributing roles to cerebral white matter and neurocognitive abnormalities observed in HIV+ individuals, including direct markers related to HIV disease (CD4 levels, HIV viral load, infection duration, treatment status), inflammatory biomarkers, hepatitis C coinfection, drug and alcohol abuse, and advanced age. Some methodological issues will be discussed, including those related to the neuroimaging methods and statistical analyses utilized in the studies.

About the Speaker

Win Gongvatana received a B.Eng. in industrial engineering from Thammasat University, Bangkok, Thailand; and an M.A. in psychology from New York University. He subsequently received a Ph.D. in clinical neuropsychology from the San Diego State University/University of California, San Diego joint doctoral program in clinical psychology. He completed his predoctoral internship at Emory University School of Medicine, and a postdoctoral fellowship at the Department of Psychiatry and Human Behavior at Brown University. Dr. Gongvatana was most recently an assistant professor of psychiatry and human behavior at The Warren Alpert Medical School of Brown University, and an assistant research scientist (UC research faculty track) in the Department of Psychiatry at the University of California, San Diego. Dr. Gongvatana's primary research interest involves the use of neuroimaging methods to examine brain dysfunction associated with HIV infection, alcoholism, and other comorbid conditions. He has received funding from the US National Institute of Health, both as a principal investigator and a co-investigator, on a number of studies examining the impact of HIV infection and comorbid conditions on the brain.

~All are Welcome~